Turkey

2018 Demographic and Health Survey
Syrian Migrant Sample

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Hacettepe University Institute of Population Studies
Ankara, Turkey

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2018 TDHS is fully comparable with the models and standards developed by the worldwide Demographic and Health Surveys (The DHS Program) project. ICF International Inc. provided technical assistance on data processing, tabulation, the review of the final report.

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PREFACE

Technological developments and migration waves taking place in much of the world constitute the principal foci of the era we live in. These dynamism, mobility and innovation bring along not only paradigmatic transformations but also problematization of adaptation and implementation of vital and organizational activities through policies and strategies. In this period where establishing the relationship of knowledge and politics at the highest order is of the essence, inter-institutional and inter-personal active interaction and communication become more possible by being open to cooperations and collaborations in both local and international levels. Within this context, Turkey, with its demografic structure, health system, and migration and population policies, is in a constantly and rapidly changing and developing position, and the knowledge and policies to be produced in these issues have a more distinctive meaning and value than ever.

As the eleventh demographic survey and sixth Turkey Demographic and Health Survey carried out by Hacettepe University Institute of Population Studies since 1968, 2018 TDHS has re-constructed itself on aforementioned focal points. In this sense, it has the feature of being the first and most extensive research to produce nationally representative quantitative data by means of sample, listing, fieldwork stages designed specific to Syrian migrant population living in Turkey along with Turkey population in general. Data-based monitoring of Turkey is of high importance in terms of Sustainable Development Goals. With this design, some indicators for Turkey, which cannot be obtained from other data sources, are produced within the scope of 2018 TDHS. Additionally, Computer Assisted Personal Interviewing (CAPI) has been preferred in 2018 TDHS as an innovative technique in order to, first, be in tune with the times through technological improvements and in line with their requirements; and, second, to contribute epistemologically, ontologically and methodologically to the discussions of the minimization of time-labour-budget triangle while maximizing the data quality.

Under the light of this theoretical and political background, 2018 TDHS was initiated in May 2018 as a 30-month project. After the completion of sample design, sample selection, and questionnaire design, the listing activity took place in August-September 2018; and data collection and data entry activities in October 2018-February 2019. In 2018 TDHS, interviews were completed with 13,982 households and 7,345 women in 15-49 age group in 754 clusters.

In realization of 2018 TDHS, many institutions and individuals had significant efforts, contributions and support at various stages.

I would like to thank The Scientific and Technological Research Council of Turkey who has supported the 2018 TDHS project as a Research and Development (R&D) project under the 1007 Support Program for Research Projects of Public Institutions; the Presidency of Turkey Directorate of Strategy and Budget who is the beneficiary institute and has contributed to all stages of the project; the Ministry of Health, Public Health Institution of Turkey, especially for their support during fieldwork; the Turkish Statistical Institute and the Ministry of Interior Directorate General of Migration Management for their contribution in sample selection; the Governorships, Provincial Public Health Directorates and Provincial Directorates of Migration Management and UNICEF Turkey for their support during the fieldwork.

I pay tribute to valuable contributions of the Steering Committee members of 2018 TDHS and contributions of academics, employees of public and international institutions, who did not withhold their support and recommendations during the questionnaire design.

I am grateful to all respondents in selected households of the survey sample who accepted to be involved in the survey and answered the questions, as well as the personnel in pre-testing, listing, data collection and data entry for their efforts. Without their participation, this survey could not have been carried out.

I would like to thank all experts at the DHS Program/ICF International team for their contributions to data entry, data processing and analysis and to the finalization of the report in English, as well as to making the survey reach international standards.

I would like to express my gratitude to our Rector Prof. Dr. A. Haluk Özen for his support in all phases of the most recent survey of demographic survey series carried out more than a half century by Hacettepe University Institute of Population Studies. Last but not least, I would like to thank to our Institute's professors, academic staff, project assistants and administrative personnel, who actualized the survey by contributing to all stages of 2018 TDHS with their endeavors and knowledge.

Assoc. Prof. Dr. Alanur Çavlin
Project Coordinator

SUMMARY INDICATORS

Sustainable Development Goal Indicators – 2018 Turkey DHS: Syrian Sample

Indicator	Sex		Total	DHS table number
	Male	Female		
2. Zero hunger				
2.2.1 Prevalence of stunting among children under 5 years of age	19.9	14.7	17.4	11.1
2.2.2 Prevalence of malnutrition among children under 5 years of age	13.9	10.4	12.3[a]	11.1
a) Prevalence of wasting among children under 5 years of age	2.3	1.4	1.9	11.1
b) Prevalence of overweight among children under 5 years of age	11.6	9.0	10.4	11.1
3. Good health and well-being				
3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	na	37.8	na	7.11
5. Gender equality				
5.6.1 Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care[1]	na	34.9	na	-
16. Peace, justice, and strong institutions				
16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority	79.7	78.4	79.1	2.11

na = Not applicable

[1] Data are available for currently married women who are not pregnant only. This figure is not presented in the main report.

[a] The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females

Summary Indicators – 2018 Turkey DHS Syrian Sample

Demographic Indicators	
Fertility	
Births per women age 15-49	
Total fertility rate	5.3
Total wanted fertility rate	4.2
Mortality	
Deaths per 1000 births	
Infant mortality rate	22
Under-five mortality rate	27
Gender equality	
Marriage	
Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18	
a) before age 15	9.2
b) before age 18	44.8
Reproductive health	
High-risk childbearing	
Adolescent women age 15-19 who have begun childbearing	39.3
Adolescent birth rates per 1.000 women Women aged 15-19 years[1]	209.0

[1] Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19

Family planning	
Percentage of currently married women 15-49	
Women currently using:	
Any contraceptive method	43.1
Any modern contraceptive method	24.1
Women with an unmet need for family planning	
For spacing births	9.5
For limiting births	11.3
Safe motherhood	
Percentage of women with a live birth in the five years before the survey	
Women who received antenatal carefrom a skilled health provider	92.9
Births delivered at home	5.0
Births delivered by a skilled health provider	97.5
Women who received a postnatal checkup within 4 hours of delivery[2]	79.5

[2] Percentage of women with a live birth in the 2 years before the survey

Summary Indicators – 2018 Turkey DHS Syrian Sample (continued)

Child health and well-being	
Vaccinations	
Children age 12-23 months who received all age appropriate vaccines (BCG, three doses of DTaP-Hib-IPV, three doses of hepatitis B, first dose of OPV and three doses of PCV)	60.4
Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being[3]	74.8
Maternal health and nutrition	
Breastfeeding	
Median duration of breastfeeding (months)	13.7
Malnutrition among women	
Women with chronic malnutrition (BMI<18.5)	3.0
Women who are overweight (30.0>BMI>=25.0)	28.3
Women who are obese (BMI>=30.0)	31.7

[3] Measured for children age 36-59 months

INTRODUCTION AND SURVEY METHODOLOGY 1

The 2018 Turkey Demographic and Health Survey (TDHS) Syrian Migrant Sample was implemented by the Hacettepe University Institute of Population Studies. Data collection took place from November 23, 2018 to February 12, 2019. The beneficiary institution of this project is the T.R. Presidency of Turkey Directorate of Strategy and Budget. The financial support of the 2018 TDHS is provided by The Scientific and Technological Research Council of Turkey (TÜBİTAK) within the scope of the 1007 Support Program for Research Projects of Public Institutions. ICF International provided technical assistance through The DHS Program, which is funded by the United States Agency for International Development (USAID) and offers financial support and technical assistance for population and health surveys in countries worldwide. Other agencies and organizations that facilitated the successful implementation of the survey through technical or financial support were the Turkish Statistical Institute, the Ministry of Interior Directorate General of Migration Management, the Ministry of Health, and the United Nations Children's Fund (UNICEF).

1.1 SURVEY OBJECTIVES

The primary objective of the 2018 TDHS Syrian Migrant Sample is to provide the first ever household level demographic and health indicators of the Syrian migrant population in Turkey.

Specifically, the 2018 TDHS Syrian Migrant Sample:

- Collected data that allows the calculation of some demographic and health indicators, particularly fertility rates and childhood mortality rates,
- Obtained information on direct and indirect factors that determine levels in fertility and childhood mortality,
- Measured the level of contraceptive knowledge and practice,
- Collected data relative to maternal and child health, including immunizations, antenatal care, and postnatal care, assistance at delivery, and breastfeeding,
- Measured the nutritional status of children under 5 and all women age 15-49,
- Collected data on reproductive-age women about marriage, employment status, and social status, and
- Obtained data on Sustainable Development Goal (SDG) indicators.

The information collected through the 2018 TDHS is intended to assist policy makers and program managers in evaluating and designing programs and strategies for improving the health of the country's population. Following the 2008 TDHS and the 2013 TDHS, the 2018 TDHS is accepted as a part of the Official Statistic Program of Turkey. Additionally, the 2018 TDHS is included in the 2019 Annual Presidential Program of Turkey.

1.2 SAMPLE DESIGN

Due to distinctive sample frame and limited information on Syrian population, the sample design that aims to reach Syrian households different from the national sample design. The sample design of the 2018 TDHS for the Syrian population living in Turkey, used a multi-stage, stratified cluster sampling approach.

The main aim of the sample design is to produce estimates on important demographic characteristics and health indicators for Syrians living in Turkey. The data on the Syrian population in Turkey is kept by the Ministry of Interior, General Directorate of Migration Management. Due to the lack of a frame consisting of each Syrian household in Turkey, a sample was designed based on the population size of each quarter, which is the smallest administrative unit in Turkey. Stratification in the 2018 TDHS Syrian sample was based on only one variable, which was an indicator variable for camp/non-camp population.

First stage sample selection included the selection of quarters as primary sampling units from each stratum. The second stage of sample selection, which is selection of households, was carried out after block lists were created by field teams that identified Syrian households in selected quarters.

The target sample size of the 2018 TDHS Syrian Migrant Sample was set at 2,000 households to be interviewed in 100 clusters. This sample size was determined to ensure an acceptable level of precision for core indicators that could be compared with those obtained from the national sample. Fifteen of the clusters were selected from the camps, and 85 were selected outside camps, from quarters. In the 2018 TDHS Syrian sample, 20 households were selected in each cluster.

Just as with the national sample, for the sample of 2018 TDHS Syrian migrants, all women age 15-49 who were usual residents of the selected households and/or were present in the household on the night before the interview were regarded as eligible for the Woman's Questionnaire. Likewise, interviews were conducted with all women age 15-49 regardless of their marital status in the 2018 TDHS Syrian Migrant Sample.

A more technical and detailed description of the sample design, selection and implementation is presented in Appendix A.

1.3 QUESTIONNAIRES

Two questionnaires, as same with 2018 TDHS, were also used in the 2018 TDHS Syrian Migrant Sample: the Household Questionnaire and the Woman's Questionnaire. The questionnaires, based on The DHS Program's Model Questionnaires, were adapted to reflect the population and health issues relevant to Turkey. The household and women questionnaires of 2018 TDHS were translated to Arabic in order to be used for the Syrian Migrant Sample. Since some of the field personnel, whose mother tongue was Arabic, could not read the Arabic alphabet, the questionnaires were translated using both Arabic and Latin alphabets.

The Household Questionnaire was used to enumerate all members of and visitors[1] to the selected households and to collect information relating to the socio-economic level of the households. In the first part of the Household Questionnaire, basic information was collected on the age, sex, educational attainment, marital status, and relationship to the head of household of each person listed as a household member or visitor. The objective of the first part of the Household Questionnaire was to identify women who were eligible for the Individual Questionnaire. In the second part of the questionnaire, questions were included on the dwelling unit and on the ownership of a variety of consumer goods.

[1] Persons who were not usual household members but who were present in that household on the night before the interview were identified as "visitors" and were included in the household roster in order to obtain the *de facto* survey population.

The Woman's Questionnaire was designed for women listed in the household schedule age 15-49. This questionnaire covers the major topics listed below:

- Basic Characteristics
- Migration history
- Pregnancy, birth history and fertility preferences
- Knowledge and use of contraceptive methods
- Antenatal and postnatal care
- Breastfeeding and nutrition
- Immunization
- Early childhood development
- Marriage history and marriage characteristics
- Women's work history
- Husband's background characteristics
- Women's status
- Anthropometric measurements of women and children

The calendar module in the Woman's Questionnaire was used to record monthly fertility and contraceptive use for a period of approximately six years beginning from January 2013 up to the survey month.

The 2018 TDHS was reviewed and has received ethical approval from Hacettepe University Ethics Commission.

English versions of the two questionnaires can be seen in 2018 Turkey DHS Final Report Appendix E.

1.4 ANTHROPOMETRY

Height and weight measurements were recorded for women age 15-49 and their children age 0-59 months.

1.5 PRETEST

The pretest for the 2018 TDHS Syrian Migrant Sample was conducted in two phases just as the national sample. In the first phase paper questionnaires were tested, then in the second phase computer assisted questionnaires were tested. Turkish questionnaires were translated into Arabic. And accordingly, the questionnaires were tested in both Turkish and in Arabic languages. The first pretest training was done in June 25-27, 2018 with 14 trainees. Pretest fieldwork was conducted in rural and urban clusters in Ankara June 28-30, 2018. Following additional modifications, questionnaires were transferred to the computer-assisted personal interviewing (CAPI) data collection system. Then the second pretest training for CAPI was done in August 8-9, 2018. The CAPI pretest field was conducted in August 11-13 and September 7-8, 2018 in Ankara. After the pretests necessary modifications were made and the questionnaires were finalized.

1.6 TRAINING OF FIELD STAFF

Field staff candidates participated in fulltime training in Ankara. A four-week training was given to the field staff from September 11, 2018 to October 9, 2018. Training involved instructions on data collection, interviewing techniques, field procedures, questionnaire content, and conducting weight and height measurements. In the first two weeks of the training, candidates were instructed on how to administer the paper

questionnaire. In the last two weeks, they trained on the CAPI. Trainers conducted mock interviews in a class environment. The field staff training also included presentations given by specialists from the Ministry of Health Public Health Institution of Turkey and the Ministry of Interior Directorate General of Migration Management. In the final stage of the training, three days of field practice was conducted for hands-on experience for trainees. Based on their performance in training, candidates were selected for the fieldwork.

1.7 FIELDWORK

Data collection for the 2018 TDHS Syrian Migrant Sample was carried out by teams. Each team was comprised of six people who are bilingual Turkish and Arabic speakers: three female interviewers, a male measurer, a female listing personnel and a team supervisor. One of the project assistants of the 2018 TDHS also worked in the field as a team supervisor and another project assistant worked as a measurer. An academic staff of the Institute of Population Studies worked as the field coordinator. Other academic staff of the Institute visited the teams during the fieldwork for monitoring and support. They also communicated their observations about the teams to the field director. The fieldwork was initiated with three teams and was carried out in 97 clusters out of 100 between November 23, 2018 and February 12, 2019.

For the 2018 TDHS Syrian Migrant Sample, in each cluster 20 households were interviewed. The interviews completed in the tablets were first sent to the team supervisor with Bluetooth technology, and then to the central data system by the team supervisor.

1.8 DATA PROCESSING

An academic staff of the Institute of Population Studies worked as the data processing coordinator. All electronic data files were transferred to the central office. The data processing included checking of notes, secondary editing and coding of open-ended questions. CSPro software was employed for data processing. Throughout the duration of fieldwork, field-check tables were generated to check various data quality parameters. Based on these tables, specific feedback was given to the field teams to improve their performance. Data editing activities were completed in February 2019. The preliminary results were prepared in April 2019. Data processing was finalized in September 2019 following the visit of the data processing team of the 2018 TDHS to ICF.

1.9 RESPONSE RATES

The results of the household and individual questionnaires are summarized in **Table 1.1**. Information is provided on the overall coverage of the sample, including household and individual response rates. In all, 1,960 households were selected for the 2018 TDHS. At the time of the listing phase of the survey, 1,932 households were considered occupied and, thus, available for interview. Of the occupied households, 95 percent (1,826) households were successfully interviewed.

In the interviewed 1,826 households, 2,391 women age 15-49 were identified as eligible for the individual interview. Interviews were successfully completed with 2,216 of these women (%93). Among the eligible women not interviewed in the survey, the principal reason for non-response was the failure to find the women at home after repeated visits to the household.

A more complete description of the sample design is presented in Appendix A.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Turkey DHS 2018 - Syrian Sample

Result	Residence		
	Non-camp	Camp	Total
Household interviews			
Households selected	1,700	260	1,960
Households occupied	1,687	245	1,932
Households interviewed	1,593	233	1,826
Household response rate[1]	94.4	95.1	94.5
Interviews with women age 15-49			
Number of eligible women	2,125	266	2,391
Number of eligible women interviewed	1,963	253	2,216
Eligible women response rate[2]	92.4	95.1	92.7

[1] Households interviewed/households occupied
[2] Respondents interviewed/eligible respondents

HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION 2

Key Findings

- ***Drinking water and sanitation:*** Almost all households in Syrian sample have access to an improved source of drinking water, and 97% use improved toilet facilities.
- ***Tobacco smoking inside the home:*** In 56% of households, someone smokes inside the house on a daily basis, and in 2% of households, someone smokes inside on a weekly basis.
- ***Household composition:*** On average, Syrian households in Turkey have 6 members, and 10% of households are female-headed.
- ***Birth registration:*** 79% of children under age 5 are registered with civil authorities.
- ***School attendance:*** 78% of females age 6-13 attend primary or secondary school, as compared with 74% of males. The net attendance ratio (NAR) drops in high school: 17% of females and 12% of males age 14-17 attend high school.

Information on the socioeconomic characteristics of the household population in the 2018 TDHS Syrian Migrants Sample provides context to interpret demographic and health indicators and can furnish an approximate indication of the representativeness of the survey. In addition, this information sheds light on the living conditions of the population.

This chapter presents information on sources of drinking water, sanitation, exposure to smoke inside the home, wealth, household population composition, educational attainment, school attendance, birth registration, and family living arrangements.

2.1 DRINKING WATER SOURCES AND TREATMENT

Improved sources of drinking water

Include piped water, public taps, standpipes, tube wells, boreholes, protected dug wells and springs, rainwater, water delivered via tanker truck or a cart with a small tank, and bottled water.

Sample: Households

Table 2.1 provides information on the source of drinking water and the time to obtain drinking water by non-camp and camp population. Almost all households have access to an improved source of drinking water, there is no difference observed between camps and non-camp households. Seventy-six percent of all households use piped water within their dwelling and 21% use bottled water. The source of drinking water differs between

non-camp households and households in camps. The most common sources of drinking water in non-camp households are piped water within the dwelling (76%) and bottled water (21%), whereas in camp households, the most common source of drinking water is piped water in the dwelling (62%) and public tap/standpipe (28%).

More than nine in ten households (98%) report having water on their premises. Drinking water is available on the premises in 99% of non-camp households and 95% in camp households. Including those with water on the premises, almost all households have access to water within 30 minutes.

2.2 SANITATION

Improved toilet facilities

Include any non-shared toilet of the following types: flush/pour flush toilets to piped sewer systems, septic tanks, and pit latrines; ventilated improved pit (VIP) latrines; pit latrines with slabs; and composting toilets

Sample: Households

The lack of availability of hygienic sanitation facilities poses a serious health problem. **Table 2.2** shows the proportion of households and de jure population with access to hygienic sanitation facilities. Ninety-seven percent of households have access to an improved toilet facility that is not shared with other households, of which 97% are flushed to a piped sewer system and less than 1% are pit latrines with a slab. These improved not shared sanitation facilities are more common in non-camp households (98%) than in camp households (85%). In camps, 9% of households have access to an improved share toilet facility, however 7% have not any facility.

2.3 OTHER HOUSING CHARACTERISTICS

The physical characteristics of the household reflect the household's economic status and have an important environmental impact on maternal and child health. Information on household characteristics such as type of flooring material, number of rooms used for sleeping and frequency of smoking in the home are shown in **Table 2.3**.

With regard to flooring, the most commonly used material is tile (39%) followed by cement (32%) and parquet (polished wood) (20%). There are substantial differences in the flooring materials between non-camp and camp households. Among non-camp households, 41% have a tile floor compared with about 5% of camp households. Thirty-eight percent of the camp households live in dwellings with vinyl covering and 1% of households in non-camp households have vinyl covering.

Data on the number of sleeping rooms per household was collected in the 2018 TDHS Syrian Sample to help assess the extent of crowding. **Table 2.3** shows that 76% of households have one or two rooms for sleeping and 24% have three or more rooms for sleeping. Camp households tend to have less sleeping rooms, while in non-camp households 25% have three or more rooms; this percentage decreases to 4% in camp households.

Exposure to smoke inside the home, from smoking tobacco, has potentially harmful health effects. In 59% of households, someone smokes inside the house and in 56% of households someone smokes on a daily basis. Smoking inside the home is more common in non-camp households compared with camp households (59% and 51%, respectively) (**Table 2.3**).

2.4 HOUSEHOLD WEALTH

Household Durable Goods

Ownership of household effects and other possessions is a useful indicator of a household's social and economic well-being. **Table 2.4** presents the availability of selected household possessions by residence. Washing machine is the most common device with 85% of households owning one. Half of the households have a satellite TV service, forty-three percent of households have a gas/electric oven and forty-one percent of households have an internet connection. Non-camp households have higher populations of household effect ownership. A low proportion of households have a means of transportation (3%).

2.5 HOUSEHOLD POPULATION AND COMPOSITION

Household

A person or group of related or unrelated persons who live together in the same dwelling unit(s), who acknowledge one adult male or female as the head of the household, who share the same housekeeping arrangements, and who are considered a single unit.

De facto population

All persons who stayed in the selected households the night before the interview (whether usual residents or visitors).

De jure population

All persons who are usual residents of the selected households, whether or not they stayed in the household the night before the interview.

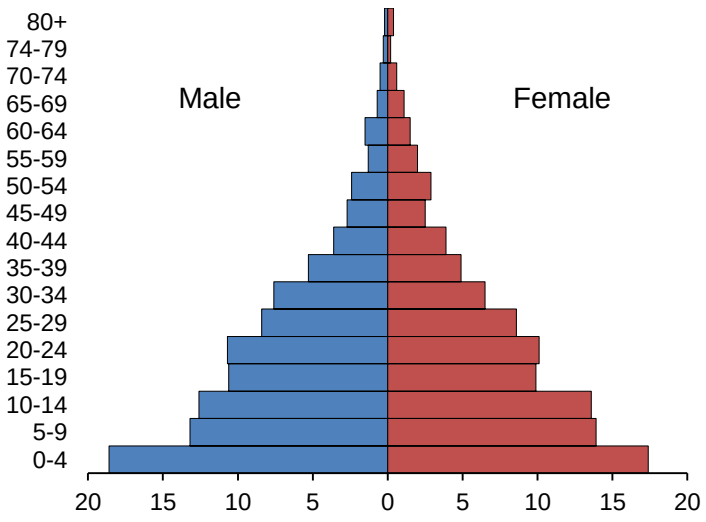
How data are calculated

All tables are based on the de facto population, unless specified otherwise.

A total of 10,897 (weighted number) individuals stayed overnight in the 1,826 households interviewed in the 2018 TDHS Syrian Sample. Among these individuals, 5,661 were male and 5,236 were female (**Table 2.5**), yielding a sex ratio of 108 males per 100 females. The population pyramid in **Figure 2.1** illustrates the distribution of the population by 5-year age groups and sex. Children under age 15 account for 45% of the population, adolescents (10-19) account for 23% and individuals age 65 and older make up 2% (**Table 2.5** and **Figure 2.1**).

The majority of households are male-headed (90%), with small differences by non-camp and camp households. The average household consists of 6.0 usual members, with small differences by non-camp and camp households (**Table 2.6**). Twelve percent of households have

***Figure 2.1* Population Pyramid**
Percent distribution of Syrian household population



foster and/or orphan children; this percentage is two times more among non-camp households compared with camp households (13% and 6%, respectively) (**Table 2.6**).

2.6 Children's Living Arrangements and Parental Survival

Orphan
A child with one or both parents who are dead.
Sample: Children under age 18

Table 2.7 shows that 85% of children under age 18 live with both biological parents. By background characteristics, differences in children's living arrangement are quite small. The only exception is with regards to children's age, where, as expected, the proportion of children living with both parents, decreases as age increases. Eleven percent of children under 18 live with only one parent, 10% only with their mother and 2% only with their father. Approximately 5 percent of children live with only one parent because the other parent is dead. The percentage of children below age 18 who do not live with a biological parent is 3%.

Patterns by background characteristics

- Orphanhood increases with age. Two percent of children age 0-4 are orphans, as compared with 13% age 15-17 who are orphans.

2.7 Birth Registration

Registered birth
Child has a birth certificate or child does not have a birth certificate, but his/her birth is registered with the civil authorities.
Sample: Children under age 5 born to interview women

Table 2.8 presents information on the percentage of children under five years of age whose births were officially registered. The table shows that 79% of births were registered. There is little variation in birth registration rates by the child's sex. Registration increases with age. Seventy-four percent of children age under 2 are registered, as compared with 83% age 2-4 who are registered. Considering place of residence, a lower percentage of the children who live in camps were registered compare to children who live in non-camp households (71% and 80% respectively).

2.8 Education

2.8.1 Educational Attainment

Median educational attainment
Half of the population has completed less than the median number of years of schooling, and half of the population has completed more than the median number of years of schooling.
Sample: De facto household population age 6 and older

Table 2.9 presents information on educational attainment among the Syrian household population age 6 and over. Overall, 40% of females age 6 and over have never been to school or have attended primary school but have not graduated from this level. Thirty-seven percent of women are graduates of primary level education, or

have attended secondary school but have not completed it. The proportion of women who completed secondary level education is 13%, and 9% of women received education at the high school level or higher. Syrian females age 6 and over have completed a median of 4.5 years of schooling.

The level of education for male Syrian household population in Turkey is slightly higher compared to their female counterparts. The proportion of males age 6 and over who have not attended school or have not completed primary school is 35%. 38% of men have completed primary school and 15% have completed secondary school. About one in ten males (11%) are high school or higher graduates. The median years of schooling for males age 6 and above is 5.1.

Patterns by background characteristics

- The median number of years of schooling for Syrian household population is highest among the 20-24 and 25-29 age groups for both sexes (7.6 years and 6.7 years, respectively for females, and 6.9 years and 7.1 years, respectively for males). The median years of schooling completed does not differ according to non-camp and camp residence (4.5 years each for females, and 5.1 for each for males).

2.8.2 School Attendance

Net attendance ratios (NAR)

Percentage of the school-age population that attends primary, secondary or high school.

Sample: Children age 6-13 for primary or secondary school NAR and children age 14-17 for high school NAR

Gross attendance ratios (GAR)

The total number of children attending primary or secondary school divided by the official primary or secondary school age population and the total number of children attending high school divided by the official high school age population.

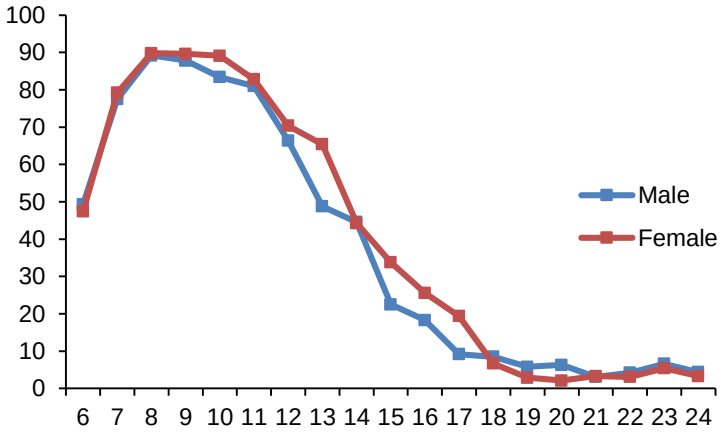
Sample: Children age 6-13 for primary and secondary school GAR and children age 14-17 for high school GAR

The 2018 TDHS Syrian Sample's information on current school attendance are presented for the population age 6-17 years. The age-specific attendance rates for the population by sex are shown in **Figure 2.2**.

School attendance ratios are shown in **Table 2.10**. Seventy-eight percent of females age 6-13 attend primary or secondary school, as compared with 74% of males. The net attendance ratio (NAR) drops in secondary school: 17% of females and 12% of males age 14-17 attend high school.

The gross attendance ratio (GAR) for primary school is 85% for females and 80%

***Figure 2.2* Age specific attendance rates**
Percentage of the Syrian household population attending school by age and sex



for males; the GAR for secondary school is 19% for females and 16% for males.

Gender Parity Indices (GPI)

The ratio of female to male students attending primary and secondary school and the ratio of female to male students attending high school. The index reflects the magnitude of the gender gap.

Sample: Primary, secondary and high school students

The gender parity index (GPI) for the NAR at the primary school is 1.06, indicating that there are slightly more female students attending primary school. At the secondary school level, female students outnumber male students with a GPI of 1.45.

The gender parity index (GPI) for the GAR at the primary school is 1.06, indicating that there are slightly more female students attending primary school. At the secondary school level, female students outnumber male students with a GPI of 1.23.

Patterns by background characteristics

- At the primary school level, the NAR and the GAR are higher in camp areas than non-camp areas (87% and 92% respectively in camp areas, as opposed to 75% and 82% in non-camp areas). At the high school level, differences in enrollment ratios are substantial: the camp NAR is 35% compared to 13% for non-camp residences; and the GAR is 40% to 16% for camp and non-camp areas respectively.

List of Tables

For more information on household population and housing characteristics, see the following tables:

- **Table 2.1 Household drinking water**
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Table 2.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water and by time to obtain drinking water; percentage of households and de jure population with basic drinking water service and percentage with limited drinking water service, according to residence, Turkey DHS 2018 - Syrian Sample

Characteristic	Households			Population		
	Non- camp	Camp	Total	Non- camp	Camp	Total
Source of drinking water						
Improved source	99.6	100.0	99.6	99.7	100.0	99.7
Piped into dwelling/yard plot	76.3	62.2	75.6	79.9	65.4	79.2
Public tap/standpipe	1.3	27.9	2.5	1.4	26.3	2.5
Tube well or borehole	0.2	0.0	0.2	0.2	0.0	0.2
Protected dug well	0.6	3.0	0.7	0.6	2.4	0.7
Protected spring	0.2	0.4	0.2	0.2	0.5	0.2
Bottled water	21.1	6.4	20.5	17.4	5.3	16.9
Unimproved source	0.3	0.0	0.2	0.2	0.0	0.1
Unprotected dug well	0.1	0.0	0.1	0.1	0.0	0.1
Unprotected spring	0.1	0.0	0.1	0.0	0.0	0.0
Surface water	0.1	0.0	0.1	0.1	0.0	0.1
Other	0.1	0.0	0.1	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)						
Water on premises[1]	98.6	94.8	98.4	98.4	93.7	98.2
30 minutes or less	1.3	4.3	1.5	1.5	5.4	1.7
More than 30 minutes	0.1	0.9	0.1	0.1	0.9	0.1
Don't know/missing	0.1	0.0	0.1	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage with basic drinking water service[2]	99.5	99.1	99.5	99.6	99.1	99.6
Percentage with limited drinking water service[3]	0.1	0.9	0.1	0.1	0.9	0.1
Number of households/population	1,740	86	1,826	10,430	480	10,911

[1] Includes water piped to a neighbor and those reporting a round trip collection time of zero minutes

[2] Defined as drinking water from an improved source, provided either water is on the premises or round-trip collection time is 30 minutes or less. Includes safely managed drinking water, which is not shown separately.

[3] Drinking water from an improved source, provided round-trip collection time is more than 30 minutes

Table 2.2 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, percent distribution of households and de jure population with a toilet/latrine facility by location of the facility, percentage of households and de jure population with basic sanitation services, according to residence, Turkey DHS 2018 - Syrian Sample

Type and location of toilet/latrine facility	Households			Population		
	Non-camp	Camp	Total	Non-camp	Camp	Total
Improved, not shared facility						
Flush/pour flush to piped sewer system	97.6	84.5	97.0	97.6	83.7	97.0
Pit latrine with slab	0.3	0.0	0.3	0.4	0.0	0.3
Improved, shared facility						
Flush/pour flush to piped sewer system	1.8	8.6	2.1	1.9	8.5	2.2
Pit latrine with slab	0.1	0.0	0.1	0.0	0.0	0.0
Unimproved facility						
Pit latrine without slab/open pit	0.1	0.0	0.1	0.1	0.0	0.1
Open defecation (No facility/bush/field)	0.1	6.9	0.4	0.1	7.8	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/ population	1,740	86	1,826	10,430	480	10,911
Location of toilet facility						
In own dwelling	87.2	90.8	87.3	86.4	90.8	86.5
In own yard/plot	12.0	9.2	11.9	12.9	9.2	12.7
Both inside and outside	0.8	0.0	0.8	0.8	0.0	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/ population with a toilet/latrine facility	1,738	80	1,818	10,423	443	10,865
Percentage with basic sanitation service[1]	97.9	84.5	97.3	97.9	83.7	97.3
Number	1,740	86	1,826	10,430	480	10,911

[1] Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.

Table 2.3 Household characteristics

Percent distribution of households and de jure population by housing characteristics, and percent distribution by frequency of smoking in the home, according to residence, Turkey DHS 2018 - Syrian Sample

Housing characteristic	Households			Population		
	Non-camp	Camp	Total	Non-camp	Camp	Total
Flooring material						
Earth, sand	0.1	0.0	0.1	0.0	0.0	0.0
Wood/planks	1.3	6.0	1.5	1.3	6.5	1.5
Parquet or polished wood	19.7	22.3	19.8	17.9	20.7	18.0
Tile	40.7	4.7	39.0	41.1	5.5	39.6
Cement	32.8	7.7	31.7	34.1	7.4	32.9
Carpet	1.2	0.0	1.2	1.1	0.0	1.0
Vinyl covering	0.6	37.8	2.4	0.6	38.9	2.3
Mozaic	0.8	0.0	0.7	0.7	0.0	0.6
Laminate	2.6	11.6	3.0	2.9	10.4	3.2
Other	0.3	9.9	0.8	0.3	10.6	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping						
One	32.8	32.2	32.8	22.5	24.6	22.6
Two	42.6	63.5	43.6	42.7	67.3	43.8
Three or more	24.6	4.3	23.6	34.8	8.2	33.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Frequency of smoking in the home						
Daily	56.8	48.9	56.4	58.5	51.3	58.1
Weekly	1.9	2.1	1.9	1.9	2.3	1.9
Monthly	0.3	0.4	0.3	0.2	0.5	0.2
Less than once a month	0.1	0.0	0.1	0.1	0.0	0.0
Never	41.0	48.5	41.4	39.4	46.0	39.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	1,740	86	1,826	10,430	480	10,911

Table 2.4 Household possessions

Percentage of households possessing various household effects, and means of transportation by residence, Turkey DHS 2018 - Syrian Sample

Possession	Residence		
	Non-camp	Camp	Total
Household effects			
LED/LCD Television	14.1	12.9	14.1
Computer	6.5	1.3	6.3
Deep Freezer	5.8	1.7	5.6
Gas/Electric oven	43.7	37.8	43.4
Microwave oven	1.0	0.0	1.0
Dishwasher	1.4	0.9	1.4
Garbage dispenser	0.3	0.0	0.3
Washing machine	85.9	56.7	84.5
Drying machine	1.3	0.9	1.3
Iron	28.8	13.7	28.0
Vacuum Cleaner	22.7	5.2	21.9
Home theater	0.1	0.0	0.1
Tea/Coffee machine	0.6	0.9	0.6
Kettle	3.1	2.1	3.1
Food processor/Blender	5.5	1.7	5.3
Paid TV service (Cable TV, Digitürk, D-Smart etc.)	0.1	0.0	0.1
Satellite TV	49.5	62.2	50.1
Internet connection	42.9	3.4	41.1
Air Conditioner	3.1	12.0	3.6
Means of transport			
Car/truck	2.8	3.9	2.9
Commercial vehicles	0.4	0.0	0.4
Tractor	0.1	0.0	0.1
Number of household	1,740	86	1,826

Table 2.5 Household population by age, sex, and residence

Percent distribution of the de facto household population by age groups, according to sex and residence, Turkey DHS 2018 - Syrian Sample

	Non- camp			Camp			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	18.6	17.4	18.0	19.0	16.5	17.7	18.6	17.4	18.0
5-9	13.2	13.9	13.5	19.1	16.9	18.0	13.4	14.0	13.7
10-14	12.6	13.6	13.1	13.9	16.0	15.0	12.7	13.7	13.2
15-19	10.6	9.9	10.2	9.3	7.3	8.3	10.5	9.8	10.2
20-24	10.7	10.1	10.4	4.1	7.0	5.6	10.4	9.9	10.2
25-29	8.4	8.6	8.5	5.4	6.9	6.1	8.2	8.5	8.4
30-34	7.6	6.5	7.1	5.5	6.4	6.0	7.5	6.5	7.1
35-39	5.3	4.9	5.1	6.5	6.2	6.4	5.3	5.0	5.1
40-44	3.6	3.9	3.8	5.4	4.3	4.8	3.7	4.0	3.8
45-49	2.7	2.5	2.6	3.9	2.4	3.2	2.7	2.5	2.6
50-54	2.4	2.9	2.6	2.4	2.7	2.6	2.4	2.9	2.6
55-59	1.3	2.0	1.6	1.6	2.9	2.2	1.3	2.0	1.7
60-64	1.5	1.5	1.5	0.9	1.2	1.1	1.5	1.5	1.5
65-69	0.7	1.1	0.9	1.6	0.8	1.2	0.8	1.1	0.9
70-74	0.5	0.6	0.5	0.5	0.9	0.7	0.5	0.6	0.5
75-79	0.3	0.2	0.2	0.5	0.6	0.5	0.3	0.2	0.2
80 +	0.2	0.4	0.3	0.5	0.8	0.6	0.2	0.5	0.3
Don't know/missing	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dependency age groups									
0-14	44.4	44.9	44.6	52.0	49.4	50.7	44.7	45.1	44.9
15-64	53.9	52.9	53.4	45.0	47.4	46.2	53.5	52.6	53.1
65+	1.7	2.2	1.9	3.0	3.0	3.0	1.7	2.3	2.0
Don't know/missing	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Child and adult populations									
0-17	50.7	49.8	50.3	57.7	54.3	55.9	51.0	50.0	50.5
18+	49.3	50.2	49.7	42.3	45.6	44.0	49.0	50.0	49.4
Don't know/missing	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Adolescents 10-19	23.2	23.5	23.3	23.2	23.3	23.3	23.2	23.5	23.3
Number of persons	5,428	4,995	10,423	233	241	473	5,661	5,236	10,897

Table 2.6 Household composition

Percent distribution of households by sex of head of household and by household size; mean size of household, and percentage of households with orphans and foster children under 18 years of age, according to residence, Turkey DHS 2018 - Syrian Sample

Characteristic	Residence		
	Non-camp	Camp	Total
Household headship			
Male	90.2	86.7	90.0
Female	9.8	13.3	10.0
Total	100.0	100.0	100.0
Number of usual members			
1	0.7	0.9	0.7
2	6.2	8.6	6.3
3	9.1	9.9	9.1
4	14.2	15.9	14.3
5	18.3	14.2	18.1
6	16.4	18.0	16.5
7	12.3	16.3	12.5
8	7.7	5.2	7.6
9+	15.1	11.2	14.9
Total	100.0	100.0	100.0
Mean size of households	6.0	5.6	6.0
Percentage of households with orphans and foster children under 18 years of age			
Double orphans	0.3	0.0	0.3
Single orphans[1]	7.3	5.2	7.2
Foster children[2]	6.9	1.3	6.6
Foster and/or orphan children	12.5	6.4	12.2
Number of households	1,740	86	1,826

Note: Table is based on de jure household members, i.e., usual residents.

[1] Includes children with one dead parent and an unknown survival status of the other parent.

[2] Foster children are those under age 18 living in households with neither their mother nor their father present, and the mother and/or the father are alive.

Table 2.7 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, percentage of children not living with a biological parent, and percentage of children with one or both parents dead, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/ mother				
Age														
0-4	91.7	5.2	1.7	0.6	0.2	0.4	0.0	0.1	0.0	0.2	100.0	0.5	2.0	1,962
<2	93.1	5.5	0.9	0.4	0.0	0.1	0.0	0.0	0.0	0.0	100.0	0.1	0.9	848
2-4	90.6	4.9	2.2	0.8	0.4	0.6	0.0	0.2	0.0	0.3	100.0	0.8	2.8	1,114
5-9	88.4	4.3	4.8	0.8	0.2	0.4	0.0	0.3	0.1	0.7	100.0	0.8	5.4	1,501
10-14	82.1	6.1	6.2	1.3	1.2	1.5	0.2	0.5	0.1	0.8	100.0	2.2	8.2	1,434
15-17	65.1	6.5	7.1	1.5	1.6	12.9	0.9	2.3	0.9	1.2	100.0	17.0	12.8	613
Sex														
Male	84.9	5.3	4.5	1.1	0.7	2.1	0.0	0.5	0.3	0.5	100.0	2.8	6.0	2,891
Female	85.8	5.3	4.1	0.8	0.5	2.1	0.2	0.5	0.0	0.6	100.0	2.9	5.4	2,619
Residence														
Non- camp	85.1	5.4	4.3	1.0	0.6	2.2	0.1	0.5	0.1	0.6	100.0	3.0	5.8	5,241
Camp	89.8	3.5	4.2	0.7	0.7	0.1	0.0	0.0	0.0	1.0	100.0	0.1	4.9	270
Total <15	87.9	5.2	3.9	0.9	0.5	0.7	0.0	0.3	0.0	0.5	100.0	1.1	4.8	4,898
Total <18	85.3	5.3	4.3	0.9	0.6	2.1	0.1	0.5	0.1	0.6	100.0	2.9	5.7	5,510

Note: Table is based on de jure members, i.e., usual residents.
[1] Includes children with father dead, mother dead, both dead and one parent dead but missing information on survival status of the other parent.

Table 2.8 Birth registration of children under age 5

Percentage distribution of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Percentage of children who:			Total	Number of children
	Are registered	Are not registered	Missing		
Age					
<2	73.8	26.0	0.3	100.0	807
2-4	83.3	16.5	0.2	100.0	1,025
Child's sex					
Male	79.7	20.0	0.2	100.0	971
Female	78.4	21.4	0.2	100.0	861
Residence					
Non-camp	79.5	20.3	0.2	100.0	1,752
Camp	70.7	29.3	0.0	100.0	80
Total	79.1	20.7	0.2	100.0	1,832

Table 2.9 Educational attainment of the household population

Percent distribution of the de facto household population age 6 and over by highest level of schooling completed and median years completed, according to background characteristics by sex, Turkey DHS 2018 - Syrian Sample

Background characteristic	No educ./ prim. incomp.	Complete primary[1]	Complete secondary[2]	Complete high school/ higher[3]	Don't know/ missing	Total	Number of women	Median years completed
				FEMALES				
Age								
6-9	98.9	1.1	0.0	0.0	0.0	100.0	583	0.2
10-14	43.7	47.1	9.2	0.0	0.0	100.0	719	3.4
15-19	18.4	51.2	22.6	7.1	0.6	100.0	511	5.8
20-24	11.3	41.2	29.0	18.2	0.4	100.0	521	7.6
25-29	16.9	40.8	17.8	24.5	0.0	100.0	447	6.7
30-34	22.1	49.0	14.2	14.1	0.6	100.0	342	5.6
35-39	25.8	49.7	13.0	11.5	0.0	100.0	260	5.5
40-44	22.1	54.9	10.7	12.3	0.0	100.0	207	5.5
45-49	39.4	44.1	10.2	6.1	0.3	100.0	131	5.0
50-54	60.4	28.5	6.8	3.6	0.7	100.0	151	0.0
55-59	69.6	19.2	5.1	6.2	0.0	100.0	106	0.0
60-64	74.9	13.9	7.0	2.8	1.4	100.0	78	0.0
65+	83.8	10.7	0.9	4.6	0.0	100.0	119	0.0
Don't know/ missing	*	*	*	*	*	100.0	0	*
Residence								
Non-camp	40.3	37.2	13.2	9.0	0.2	100.0	3,983	4.5
Camp	39.7	39.5	14.1	6.5	0.2	100.0	192	4.5
Total	40.3	37.3	13.2	8.9	0.2	100.0	4,175	4.5
				MALES				
Age								
6-9	98.3	1.5	0.0	0.0	0.2	100.0	638	0.3
10-14	47.2	44.9	7.9	0.0	0.0	100.0	717	3.2
15-19	24.2	53.3	18.7	3.7	0.2	100.0	595	5.3
20-24	14.1	44.3	25.7	15.1	0.9	100.0	589	6.9
25-29	15.5	38.6	16.7	26.5	2.7	100.0	466	7.1
30-34	16.7	44.9	16.9	20.8	0.8	100.0	427	6.0
35-39	17.5	46.3	20.7	14.8	0.7	100.0	300	5.8
40-44	13.1	50.1	23.6	12.0	1.2	100.0	207	6.0
45-49	24.1	37.2	17.4	20.3	0.9	100.0	154	5.9
50-54	21.6	35.8	21.0	20.5	1.1	100.0	133	6.0
55-59	16.6	48.2	17.1	18.1	0.0	100.0	75	6.0
60-64	34.6	27.3	12.1	20.8	5.2	100.0	84	5.3
65+	39.6	23.8	15.7	19.8	1.1	100.0	98	5.2
Don't know/missing	*	*	*	*	*	100.0	3	*
Residence								
Non-camp	34.8	38.3	14.9	11.2	0.8	100.0	4,306	5.1
Camp	35.2	34.1	18.7	10.8	1.2	100.0	181	5.1
Total	34.8	38.2	15.0	11.2	0.8	100.0	4,487	5.1

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Completed 4-5 grade at the primary level
[2] Completed 3-4 grade at the secondary level
[3] Completed at least 3 years of high school or above

Table 2.10 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling; and the Gender Parity Index (GPI), according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender Parity Index[3]	Male	Female	Total	Gender Parity Index[3]
PRIMARY & SECONDARY SCHOOL								
Residence								
Non-camp	73.0	77.5	75.2	1.06	79.5	84.5	81.9	1.06
Camp	84.9	88.9	86.9	1.05	90.7	94.2	92.4	1.04
Total	73.6	78.2	75.8	1.06	80.1	85.1	82.5	1.06
HIGH SCHOOL								
Residence								
Non-camp	11.0	15.4	13.0	1.40	15.3	17.7	16.4	1.16
Camp	24.5	46.8	35.0	1.91	26.4	55.3	40.0	2.09
Total	11.6	16.8	13.9	1.45	15.8	19.4	17.4	1.23

[1] The NAR for primary school and secondary school is the percentage of the primary- and secondary-school age (6-13 years) population that is attending primary and secondary school. The NAR for high school is the percentage of the high school-school age (14-17 years) population that is attending high school. By definition the NAR cannot exceed 100.0 percent.

[2] The GAR for primary and secondary school is the total number of primary and secondary school students, expressed as a percentage of the official primary- and secondary-school-age population. The GAR for high school is the total number of high school students, expressed as a percentage of the official high-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.

[3] The Gender Parity Index for primary and secondary school is the ratio of the primary and secondary school NAR(GAR) for females to the NAR(GAR) for males. The Gender Parity Index for high school is the ratio of the high school NAR(GAR) for females to the NAR(GAR) for males.

CHARACTERISTICS OF WOMEN 3

Key Findings

- ***Basic characteristics of respondents*:** 78% of Syrian women are married and 96% of women live outside camps.
- ***Education:*** 20% of Syrian women have secondary school education while 47% completed primary education and 19% have no education or incomplete primary education.
- ***Exposure to mass media:*** 4% of women age 15-49 read newspaper or magazine at least once a week. Percentage of reading newspaper or magazine increases as the level of education rises.
- ***Employment:*** The majority of women (82%) have not been employed in the 12 months preceding the survey or have never been employed. 9% of women are currently employed.
- ***Health insurance:*** 93% of Syrian women have some type of health insurance coverage.

This chapter provides descriptive information on the basic demographic and socioeconomic characteristics of the reproductive age Syrian migrant women in Turkey such as age, marital status, region, place of residence, education, media use. This information is useful for understanding the context of reproduction and health behaviors of Syrian migrant women. In addition, the information about women's employment, details about the occupation status of employed women, social security and health security coverage are also provided. Insights provided in this chapter about situation of reproductive age Syrian migrant women in Turkey to help for a better understanding of demographic phenomena discussed in the following chapters.

3.1 Basic Characteristics of Survey Respondents

Table 3.1 shows background characteristics of 2,216 women age 15-49 interviewed in the survey. Women were asked two questions in the individual interview to assess their age: "In what month and year were you born?" and "How old are you?". Interviewers were trained to probe in situations when respondents knew neither their age nor date of birth. As a last resort, interviewers were instructed to record their best estimate of the respondent's age. Sixty-one percent of women are less than 30 years of age. Seventy-eight percent of Syrian women are married, 17% have never married, 2% are divorced/separated and 3% are widowed.

Table 3.1 also shows that majority of Syrian migrant women live outside the camps while only 4% of live in camps. For information about differentials in basic characteristics of women by background characteristics, see **Table 3.1**.

3.2 EDUCATION AND LITERACY

Literacy

Respondents who have attended higher than secondary school are assumed to be literate. All other respondents, shown a typed sentence to read aloud, are considered literate if they could read all or part of the sentence.

Sample: Women age 15-49

Tables 3.2 present the distribution of survey respondents by level of education attained. The data indicate that 20% of Syrian women have secondary education level (**Table 3.2** and **Figure 3.1**). Forty-seven percent of women have completed only primary school. Approximately 19% of Syrian women have no education or incomplete primary education (**Figure 3.1**). The median number of years of schooling is 5.9 among Syrian women.

***Figure 3.1* Education of survey respondents**

Percent distribution of Syrian women age 15-49 by highest level of schooling attended or completed

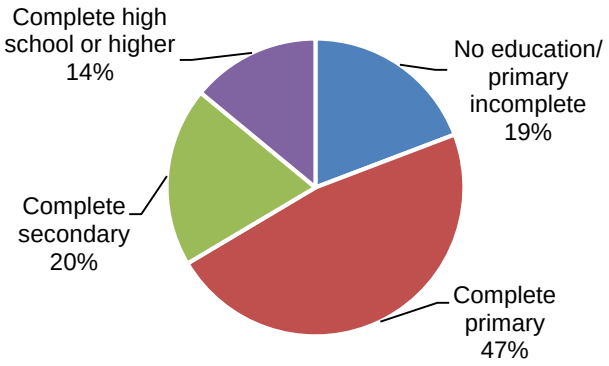


Table 3.3 shows the literacy level of Syrian migrant women by age and residence. This question was asked to the 80% of women who had completed primary or secondary school. Overall, 78% of Syrian migrant women are literate. Forty-seven percent of Syrian women who have no schooling or have primary or secondary education can read a whole sentence on the card, 11% can read part of a sentence, and 22% cannot read at all.

Patterns by background characteristics

- The results in **Table 3.2** show that 43% of women age 45-49 have no education or have not completed primary school compared with only 10% of women age 20-24. Fifty-three percent of Syrian migrant women age 15-19 and 44% of Syrian migrant women age 20-24 completed primary school. While 30% of Syrian women age 20-24 completed secondary school, 19% of Syrian women age 25-29 completed secondary school.
- The median years of schooling is identical for the women living in camp areas or outside the camps (5.9 years) (**Table 3.2**).
- As expected, literacy decreases with age, except age 40-44, from 84%in the 15-19 age group to 55% among Syrian migrant women age 45-49 years (**Table 3.3**).
- The proportion of literate Syrian migrant women living is higher in camps than non-camp areas (83% and 78%, respectively).

3.3 MASS MEDIA EXPOSURE

Exposure to mass media

Respondents were asked how often they read a newspaper or magazine. Those who responded *at least once a week* are considered regularly exposed to that form of media.

Sample: Women age 15-49

Data on Syrian migrant women's exposure to mass media are essential in the development of educational programmes and the dissemination of all types of information, particularly information about family planning and other important health topics.

Table 3.4 shows the percentage of Syrian migrant women age 15-49 who are exposed to specific media, by background characteristics. The 2018 TDHS Syrian Sample results indicates that only 4% of Syrian migrant women read a newspaper or magazine at least once a week.

Patterns by background characteristics

- The proportion of reporting mass media exposure is higher for women outside camps (4%) than those in camps (2%).
- Reading newspapers or magazines increases with education. Only 2% of Syrian migrant women with primary education reads newspaper or magazine at least once a week as compared with 12% of Syrian migrant women with high school or higher education.

3.4 EMPLOYMENT

Currently employed

Respondents who were employed in the 7 days before the survey

Sample: Women age 15-49

Table 3.5 presents the employment status of all Syrian women interviewed in 2018 TDHS by age, marital status, number of children, residence, educational level. In 2018 TDHS, information was obtained about women's all employment experiences which were longer than 6 months. Additionally, data were collected about Syrian migrant women's current employment, which refers to paid or unpaid employment within the last seven days, and employment at any time during the 12 months before the survey regardless of length of employment.

The measurement of employment can be difficult due to different perceptions of work. For example, Syrian women who work as an unpaid family worker or in the informal sector may not label themselves as working. In the 2018 TDHS, a number of complementary questions were also asked to ensure that undocumented, informal or differently-defined employment activities were captured in the interview.

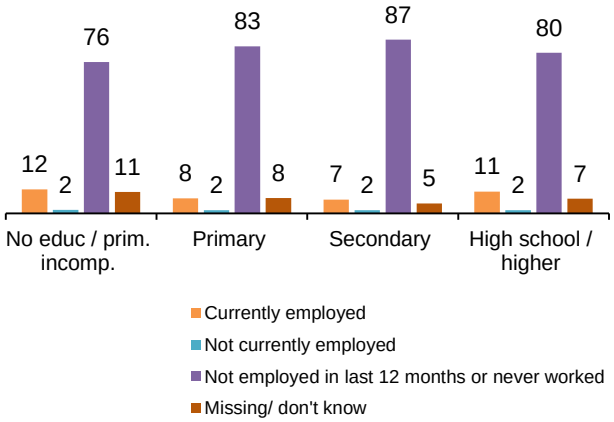
Table 3.5 shows that 9% of Syrian migrant women were currently working at the time of the survey, and 2% were not currently employed but had worked at some point during the 12 months prior to the survey. Majority of Syrian migrant women have not been employed in the 12 months preceding the survey or they have never been employed (82%).

Patterns by background characteristics

- Employment among Syrian women increases with age, peaking at 12% in the 35-39 and 40-44 age groups and decreases to 5% in 45-49 age group.
- An association seems to exists between employment and marital status; Syrian migrant women who are never married and Syrian migrant women who were divorced, separated, or widowed were more l employed than currently married Syrian women. Seventeen percent of never married and 16% of divorced, separated, and widowed Syrian women are employed, as compared with 6% of married Syrian women.
- The percentage of working is highest for women with no children. Thirteen percent of Syrian migrant women with no children are currently employed, as compared with 7% of Syrian women with five or more children.
- By residence, the proportion of working Syrian migrant women was slightly higher outside camps (9%) compared with 6% of Syrian women living in the camp.
- Syrian migrant women with no education or primary incomplete were more prevalently currently employed than Syrian migrant women with primary and secondary education (12%, 8% and 7% respectively). However, 11% of Syrian migrant women with high school or higher education are currently employed (**Figure 3.2**).

***Figure 3.2* Employment of Syrian women by education**

Percent distribution of employment status of Syrian women age 15-49 by education



3.5 Health Insurance Coverage

All Syrian women age 15-49 interviewed in the TDHS 2018 Syrian sample were asked whether or not they were covered by any health insurance. Health services provided to Syrian refugees are basically described by Temporary Protection Regulation and Social Insurance and Universal Health Insurance Law during their stay and the health insurance is valid only in the city where the person under Temporary Protection is registered.

The percent distribution of all women by health insurance coverage and background characteristics, is presented in **Table 3.6**. Accordingly, 7% of Syrian migrant women are not covered by any health insurance in Turkey. Majority of Syrian women are covered by insurance for temporary protection (92%).

List of Tables

For more information on the characteristics of survey respondents, see the following tables:

- **Table 3.1 Background characteristics of respondents**
- **Table 3.2 Educational attainment**
- **Table 3.3 Literacy**
- **Table 3.4 Exposure to mass media**
- **Table 3.5 Employment status**
- **Table 3.6 Health insurance coverage**

Table 3.1 Background characteristics of respondents

Percent distribution of women age 15-49 by selected background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Weighted percent	Weighted number	Unweighted number
Age			
15-19	21.1	467	438
20-24	21.5	476	473
25-29	17.9	397	398
30-34	14.7	326	333
35-39	11.1	245	259
40-44	8.2	183	188
45-49	5.5	123	127
Marital status			
Never married	16.6	369	330
Married	78.3	1,734	1,770
Divorced/separated	2.4	53	54
Widowed	2.7	60	62
Residence			
Non- camp	96.0	2,126	1,963
Camp	4.0	90	253
Education			
No educ / prim. incomp.	19.2	426	417
Complete primary	47.2	1,047	1,056
Complete secondary	19.5	433	433
Complete high school / higher	14.0	311	310
Total	100.0	2,216	2,216

Table 3.2 Educational attainment

Percent distribution of women age 15-49 by highest level of schooling completed, and median years completed, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Highest level of schooling: No educ. / prim. incomp.	Complete primary[1]	Complete secondary[2]	Complete high school / higher[3]	Total	Median years completed	Number of women
Age							
15-24	14.2	48.2	25.8	11.8	100.0	6.5	943
15-19	18.3	52.9	22.1	6.7	100.0	5.9	467
20-24	10.2	43.6	29.5	16.8	100.0	7.6	476
25-29	15.8	38.4	19.4	26.3	100.0	7.2	397
30-34	21.7	50.2	15.1	12.9	100.0	5.6	326
35-39	27.3	51.5	11.1	10.0	100.0	5.4	245
40-44	21.5	55.0	11.8	11.7	100.0	5.5	183
45-49	42.7	40.3	11.4	5.6	100.0	5.0	123
Residence							
Non-camp	19.4	47.1	19.5	14.0	100.0	5.9	2,126
Camp	14.6	50.5	20.7	14.3	100.0	5.9	90
Total	19.2	47.2	19.5	14.0	100.0	5.9	2,216

[1] Completed 4-5 grade at the primary level
[2] Completed 3-4 grade at the secondary level
[3] Completed at least 3 years of high school or higher

Table 3.3 Literacy

Percent distribution of women age 15-49 by level of schooling completed and level of literacy, and percentage literate, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Higher than secondary schooling	No schooling, primary or secondary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	Blind/ visually impaired	Total	Percent-age literate[1]	Number of women
Age								
15-24	21.7	52.2	9.8	16.4	0.0	100.0	83.6	943
15-19	18.3	50.7	11.9	19.1	0.0	100.0	80.9	467
20-24	24.9	53.7	7.7	13.7	0.0	100.0	86.3	476
25-29	30.9	39.2	9.5	20.4	0.0	100.0	79.6	397
30-34	15.2	45.1	15.6	24.1	0.0	100.0	75.9	326
35-39	10.6	46.4	14.4	28.5	0.1	100.0	71.3	245
40-44	13.5	50.8	10.9	24.9	0.0	100.0	75.1	183
45-49	6.7	39.0	9.2	45.1	0.0	100.0	54.9	123
Residence								
Non-camp	19.6	47.4	11.0	22.1	0.0	100.0	77.9	2,126
Camp	21.5	46.5	14.6	16.9	0.4	100.0	82.6	90
Total	19.6	47.3	11.1	21.9	0.0	100.0	78.1	2,216

[1] Refers to women who attended schooling higher than the secondary level and women who can read a whole sentence or part of a sentence

Table 3.4 Exposure to mass media

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Reads a newspaper at least once a week	No access to newspaper at least once a week	Number of women
Age			
15-19	2.3	97.7	467
20-24	4.9	95.1	476
25-29	3.0	97.0	397
30-34	2.5	97.5	326
35-39	3.1	96.9	245
40-44	8.1	91.9	183
45-49	6.3	93.7	123
Residence			
Non- camp	3.9	96.1	2,126
Camp	2.0	98.0	90
Education			
No educ / prim. incomp.	0.0	100.0	426
Complete primary	2.1	97.9	1,047
Complete secondary	5.9	94.1	433
Complete high school / higher	11.9	88.1	311
Total	3.8	96.2	2,216

Table 3.5 Employment status

Percent distribution of women age 15-49 by employment status, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of women
Age						
15-19	7.8	2.4	83.9	6.0	100.0	467
20-24	6.9	1.9	85.1	6.2	100.0	476
25-29	7.9	0.6	86.1	5.3	100.0	397
30-34	10.4	1.4	77.0	11.3	100.0	326
35-39	12.0	2.3	75.7	10.0	100.0	245
40-44	12.3	1.2	78.9	7.6	100.0	183
45-49	5.4	0.9	80.5	13.2	100.0	123
Marital status						
Never married	17.2	2.2	74.0	6.5	100.0	369
Married or living together	6.4	1.3	84.4	7.8	100.0	1,734
Divorced/separated/widowed	16.4	3.7	71.2	8.7	100.0	113
Number of living children						
0	13.4	3.3	75.4	7.9	100.0	574
1-2	6.6	1.3	85.5	6.7	100.0	669
3-4	7.8	1.0	85.4	5.8	100.0	543
5+	6.9	0.7	81.3	11.2	100.0	430
Residence						
Non- camp	8.8	1.6	81.9	7.7	100.0	2,126
Camp	5.9	2.0	84.6	7.5	100.0	90
Education						
No educ / prim. incomp.	12.0	1.8	75.5	10.7	100.0	426
Complete primary	7.5	1.6	83.3	7.6	100.0	1,047
Complete secondary	6.9	1.5	86.7	4.9	100.0	433
Complete high school / higher	10.9	1.5	80.2	7.3	100.0	311
Total	8.7	1.6	82.0	7.6	100.0	2,216

[1] "Currently employed" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.6 Health insurance coverage

Percent distribution women age 15-49 by types of health insurance coverage, percentage with any health insurance, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	General health insurance	Insurance for temporary protection	Private health insurance	Other	No insurance	Total	Percentage with any health insurance	Number of women
Age								
15-19	1.1	89.4	0.5	0.0	9.1	100.0	90.9	467
20-24	0.2	91.5	0.2	0.0	8.1	100.0	91.9	476
25-29	0.6	90.7	0.3	0.0	8.4	100.0	91.6	397
30-34	0.6	95.4	0.0	0.0	3.9	100.0	96.1	326
35-39	0.9	94.4	0.0	0.0	4.7	100.0	95.3	245
40-44	0.6	93.1	1.2	0.6	4.6	100.0	94.8	183
45-49	0.9	94.8	0.0	0.0	4.3	100.0	95.7	123
Residence								
Non-camp	0.7	91.8	0.3	0.0	7.2	100.0	92.8	2,126
Camp	0.0	100.0	0.0	0.0	0.0	100.0	100.0	90
Education								
No educ / prim. incomp.	0.0	95.0	0.0	0.0	5.0	100.0	95.0	426
Complete primary	0.1	93.6	0.1	0.0	6.2	100.0	93.8	1,047
Complete secondary	1.1	90.7	1.0	0.0	7.2	100.0	92.8	433
Complete high school / higher	2.8	85.3	0.3	0.3	11.2	100.0	88.4	311
Total	0.7	92.1	0.3	0.0	6.9	100.0	93.1	2,216

MARRIAGE 4

Key Findings

- ***Current marital status:*** 78% of Syrian women age 15-49 are currently married, 17% have never been married, 3% are widowed and the remaining 2% are either divorced or separated.
- ***Age at first marriage:*** The median age at first marriage among Syrian women age 25-49 is 19.3 years. 4% of women age 45-49 have never been married.
- ***Consanguinity:*** 39% of ever-married Syrian women age 20-24 reported that they have married a relative.
- ***Polygyny:*** 10% of married Syrian women report that their husbands have other wives.

Marriage helps determine the extent to which women are exposed to the risk of pregnancy. Thus, it is an important determinant of fertility levels. However, the timing and circumstances of marriage also has profound consequences for women's lives.

4.1 MARITAL STATUS

Currently married

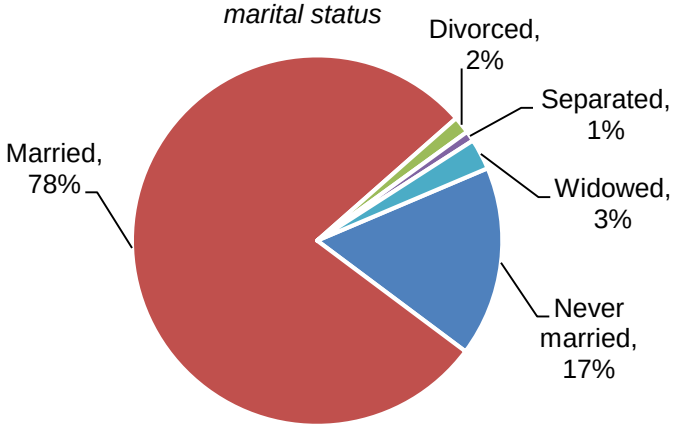
Women who report being married or living together with a partner as though married at the time of the survey.

Sample: Women age 15-49

Among Syrian migrant women in Turkey, the majority of women age 15-49 are currently married (78%), less than one-fifth (17%) are never married, 3% are widowed, and the remaining 2% are divorced, and 1% are separated (**Figure 4.1** and **Table 4.1**). The proportion of never-married women declines rapidly with age, from 51% among teenagers age 15-19 to 6% among women in their late twenties (**Table 4.1**). Five percent of women in their late thirties are never-married, and 4% of women age 45-49, who are approaching the end of the reproductive years, are never-married.

***Figure 4.1* Marital status**

Percent distribution of Syrian women age 15-49 by marital status



Note: Figures may not add up to 100% due to rounding.

Older women are more prone to be widowed than younger women. One percent of women age 15-19 are widowed compared to 8% among women at ages 40-44. Divorce does not seem to be common among Syrian women, with 2% or less for all age groups, without a specific age pattern. Separation is also uncommon, remaining at 1% for women age 15-49.

4.2 Age at First Marriage

Median age at first marriage
Age by which half of respondents have been married.
Sample: Women age 20-49 and 25-49

The median age at first marriage is 19.3 years for Syrian women age 25-49, indicating that half of women in this age group married before that age (**Table 4.2**). The median age at first marriage for the 20-49 age group is 18.9 years.

Among women in the 25-49 age group, 55% marry by age 20, 38% marry by age 18 and 12% enter marriage before their 15th birthday.

The median age at first marriage shows an inverted U shape relationship with five-year age groups. This implies that the median age at first marriage increased for about two decades since the 1990s (comparing the median age for the 45-49 age group at 18.0 to the median age of the 30-34 age group at 20.1), but has started decreasing afterwards, in 2010s (where the median age for the 20-24 age group is 18.4).

Patterns by background characteristics

- Syrian migrant women age 25-49 living in camps tend to marry 0.7 years later than those living outside of camps (20.0 years and 19.3 years, respectively) **(Table 4.3**).
- The median age at first marriage for women age 25-49 who completed high school or higher is 22.0 years, almost three years higher than the median age at marriage for women with no education or who did not complete primary school (18.9 years).

4.3 Consanguinity

Consanguinity
Ever-married women who report that they are related to their current husband, their last husband (among divorced or widowed women), or their most recent husband (among those married more than once)
Sample: Ever-married women age 15-49

Kinship marriage, also called consanguineous marriage, is common among Syrian migrant women in Turkey. Forty-six percent of ever-married women age 15-49 reported that they are related to their current husband, last husband (among divorced or widowed women), or most recent husband (among those married more than once) (**Table 4.4**).

According to the data, 28% of all marriages were first-cousin marriages (i.e., first cousins on either the father's or mother's side). The level of marriages between first cousins related only on the father's side is much higher than the level of first cousin marriages related only on the mother's side (20% versus 8%). Eighteen percent of all marriages were marriages to second cousins or other relatives.

4.4 POLYGYNY

Polygyny

Women who report that their husband or partner has other wives are considered to be in a polygynous marriage.

Sample: Currently married women age 15-49

In the Syrian sample of the 2018 TDHS, all women were asked if their husbands had a second wife. The results in this section are tabulated for currently married women, and show that polygyny is common among Syrian in Turkey. One in ten (10%) currently married women reported their husbands have a second wife (**Table 4.5**).

Patterns by background characteristics

- The prevalence of polygyny is highest after the age of 30, where the levels are over 12% (**Table 4.5**).
- By place of residence, Syrian women residing outside camps have a lower proportion of being in a polygynous union than women living in camps (10% and 15% respectively).
- There are some differences in polygyny by level of education. It is more common among women with no education or with incomplete primary school education and primary school education (12% and 11%, respectively), than women with secondary education or high school or higher education (6% and 9%, respectively).

LIST OF TABLES

For more information on marriage, see the following tables:

- **Table 4.1 Current marital status**
- **Table 4.2 Age at first marriage**
- **Table 4.3 Median age at first marriage**
- **Table 4.4 Consanguinity**
- **Table 4.5 Proportion of women with a co-wife**

Table 4.1 Current marital status

Percent distribution of women age 15-49 by current marital status, according to age, Turkey DHS 2018 - Syrian Sample

Age	Marital status					Total	Number of respondents
	Never married	Married	Divorced	Separated	Widowed		
15-19	51.4	46.4	0.9	0.7	0.7	100.0	467
20-24	11.6	84.9	2.3	0.2	1.0	100.0	476
25-29	6.0	91.0	1.2	0.3	1.6	100.0	397
30-34	7.9	84.4	1.9	1.3	4.5	100.0	326
35-39	4.7	88.1	2.0	1.3	3.9	100.0	245
40-44	4.5	84.3	0.6	2.5	8.1	100.0	183
45-49	3.6	87.5	1.7	1.7	5.4	100.0	123
Total	16.6	78.3	1.5	0.9	2.7	100.0	2,216

Table 4.2 Age at first marriage

Percentage of women age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Turkey DHS 2018 - Syrian Sample

Current age	Percentage first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage
	15	18	20	22	25			
15-19	13.4	na	na	na	na	51.4	467	a
20-24	9.2	44.8	70.6	na	na	11.6	476	18.4
25-29	7.4	40.4	56.3	71.3	89.1	6.0	397	19.1
30-34	10.1	33.4	49.7	63.5	78.9	7.9	326	20.1
35-39	13.2	32.5	52.9	67.7	80.7	4.7	245	19.7
40-44	14.2	42.0	59.5	70.9	81.2	4.5	183	18.8
45-49	24.1	50.2	61.1	73.4	84.1	3.6	123	18.0
20-49	11.1	40.0	59.2	na	na	7.4	1,749	18.9
25-49	11.8	38.3	54.9	68.8	83.3	5.8	1,273	19.3

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner
na = Not applicable due to censoring
a = Omitted because less than 50% of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group.

Table 4.3 Median age at first marriage

Median age at first marriage among women age 20-49 and age 25-49, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Women age 20-49	Women age 25-49
Residence		
Non-camp	18.9	19.3
Camp	19.5	20.0
Education		
No educ. / prim incomplete	18.8	18.9
Complete primary	18.3	18.5
Complete secondary	18.6	19.1
Complete high school / higher	a	22.0
Total	18.9	19.3

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner
a = Omitted because less than 50% of the respondents began living with their spouse/partners for the first time before reaching the beginning of the age group.

Table 4.4 Consanguinity

Percent distribution of all ever-married women age 15-49 by their relationship to their most recent husband and percentage reporting any relationship to the husband, according to background characteristics, Turkey DHS 2018 - Syrian Sample

	Relationship to husband										
Age	No relation	Son of father's brother	Son of father's sister	Son of mother's sister	Son of mother's brother	Other paternal blood relative	Other maternal blood relative	Other	Total	Percentage reporting any relationship with husband	Number of respon-dents
15-19	51.1	15.1	6.5	4.2	0.9	15.1	6.2	0.9	100.0	48.9	227
20-24	60.8	9.9	5.5	5.1	2.5	10.2	5.3	0.5	100.0	39.2	421
25-29	54.6	12	6.2	5.6	3.2	12.3	5.7	0.3	100.0	45.4	373
30-34	55.3	13.1	6	5.7	3	11.8	5	0	100.0	44.7	301
35-39	54.4	15.8	5.7	6.5	3	10.9	3.6	0	100.0	45.6	233
40-44	47.4	18.1	5.8	5.4	4.6	10.7	7.3	0.6	100.0	52.6	174
45-49	44.3	14	10.1	3.3	4.5	16.1	6.8	0.9	100.0	55.7	118
Residence											
Non-camp	54.2	13.1	6.2	5.3	2.9	12.2	5.6	0.4	100.0	45.8	1,776
Camp	57.8	16.7	6.9	3.4	3.4	7.4	4.4	0	100.0	42.2	72
Education											
No educ. / prim. incomp.	47.3	18.4	6.6	3.4	2.8	17.3	4.1	0.0	100.0	52.7	350
Complete primary	52.8	14.1	5.5	6.1	3.2	11.7	6.2	0.5	100.0	47.2	899
Complete secondary	58.5	10.1	7.5	4.8	3.0	9.4	6.4	0.3	100.0	41.5	350
Complete high school / higher	64.3	7.5	6.4	5.5	2.1	9.4	4.0	0.8	100.0	35.7	248
Total	54.4	13.3	6.2	5.3	2.9	12	5.5	0.4	100.0	45.6	1,847

Table 4.5 Proportion of women with a co-wife

Percent distribution of currently married women age 15-49 with a co-wife according to background characteristics, Turkey DHS 2018 - Syrian Sample

	Woman with		Total	Number of women
	No co-wife	A co-wife[1]		
Age				
15-19	95.1	4.9	100.0	216
20-24	95.4	4.6	100.0	404
25-29	92.8	7.2	100.0	361
30-34	84.8	15.2	100.0	275
35-39	83.5	16.5	100.0	216
40-44	87.7	12.3	100.0	154
45-49	83.6	16.4	100.0	107
Residence				
Non-camp	90.4	9.6	100.0	1,667
Camp	85.3	14.7	100.0	67
Education				
No educ. / prim. incomp.	88.1	11.9	100.0	331
Complete primary	89.4	10.6	100.0	838
Complete secondary	94.1	5.9	100.0	327
Complete high school / higher	90.9	9.1	100.0	238
Total	90.2	9.8	100.0	1,734

[1] Excludes women who responded "don't know" when asked if their husband has other wives

FERTILITY 5

Key Findings

- ***Total fertility rate:*** The current total fertility rate of Syrian migrants in Turkey is 5.3 births per women. Fertility peaks in the 20-24 age group.
- ***Fertility trends:*** 2018 TDHS Syrian Sample results retrospectively show an increase of fertility levels in early age groups and a decrease in later ages.
- ***Children ever born and living:*** For currently married Syrian women, the mean number of children ever born is 3.2 and the mean number of living children is 3.1. Only 3% of currently married women in the 45-49 age group have no children.
- ***Birth intervals:*** Median birth interval is 27 months and about one fifth of non-first births occurred within 18 months of the preceding birth.
- ***Insusceptibility to pregnancy:*** The median duration of postpartum amenorrhea is 4.1 months, abstinence is 2.2 months, and insusceptibility is 4.5 months.
- ***Age at first birth:*** The median age at first birth is 21.4 years among Syrian women age 25-49.
- ***Teenage childbearing:*** 39% of Syrian adolescents have begun childbearing: 31% have had a live birth, and 9% are currently pregnant with their first child.

The number of children that a woman bears depends on many factors, including her age when she begins childbearing, how long she waits between births, and her fecundity. Postponing first births and extending the interval between births have played a role in reducing fertility levels in many countries. These factors also have positive health consequences. In contrast, short birth intervals (of less than 24 months) can lead to harmful outcomes for both newborns and their mothers, such as preterm birth, low birth weight, and death. Childbearing at a very young age is associated with an increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality.

This chapter describes the current level of fertility of Syrian migrants in Turkey and some of its proximate determinants. It presents information on the total fertility rate, birth intervals, insusceptibility to pregnancy (due to postpartum amenorrhea, postpartum abstinence, or menopause), age at first birth, and teenage childbearing.

5.1 CURRENT FERTILITY

Total fertility rate

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the 3 years before the survey, based on detailed birth histories provided by women.

Sample: Women age 15-49

Table 5.1 presents information on the current fertility levels for Syrian migrants in Turkey as a whole and for camps and non-camp areas 3 years preceeding the survey (reference date is June 2017). The total fertility rate for Syrian migrants in Turkey is 5.3 births per woman. The peak of the age-specific fertility rate occurs in the 20-24 age group. The general fertility rate (per 1,000 women age 15-44) is 203, and the crude birth rate (per 1,000 population) is 42.

Fourteen percent of Syrian migrant women age 15-49 are currently pregnant, and the mean number of children ever born to women age 40-49 is 5.5 (**Table 5.2**).

Figure 5.1 **Age-specific fertility rates during the last two decades**

Age-specific fertility rates per 1,000 Syrian women for five-year periods preceding the survey

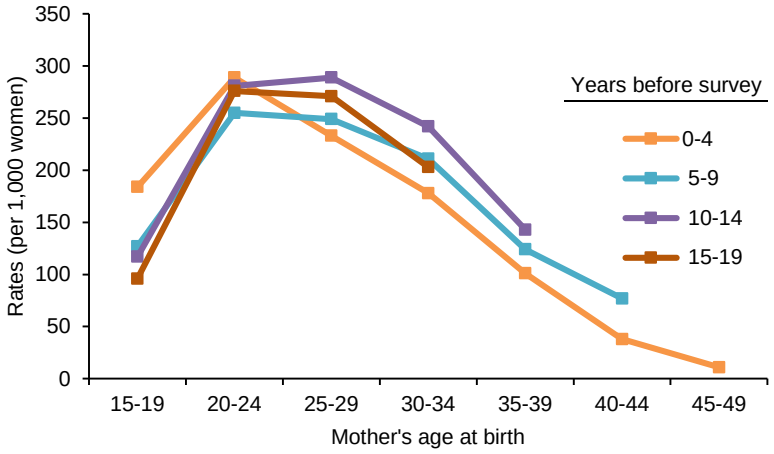


Table 5.3 and **Figure 5.1** show trends in ASFRs for 5-year periods preceding the survey. Because women age 50 years and over were not interviewed, the rates for older age groups become progressively more truncated for periods more distant from the survey date. The age-specific fertility rates calculated over a 20-year time frame provide evidence of an increase in fertility at ages 15-24. On the other hand, for age 25 and higher, fertility has declined.

Patterns by background characteristics

- The TFR is highest among women with no education (5.8) and lowest among women with high school or higher education (4.1).
- Women age 40-49 with no education had an average of 6.2 births during their lifetime.

5.2 CHILDREN EVER BORN AND LIVING

The distribution of children ever born by age of Syrian migrants in Turkey shows that nearly 70% of women age 15-19 have never given birth (**Table 5.4**). However, this proportion declines to 25% for women age 20-24, and to 8% or less among women age 35 and older. Only 7% of women age 45-49 have never given birth.

Overall, currently married Syrian women age 15-49 have had an average of 3.2 children compared with 2.7 children among all women, regardless of current marital status. On average, by the end of their reproductive years (age 45-49), Syrian migrant women in Turkey have given birth to 6.0 children with 5.5 surviving.

The level of childlessness among married Syrian women at the end of their reproductive period can be used as an indicator of the level of primary sterility. Results indicate that primary sterility among currently married Syrian migrant women age 45-49 in Turkey is 3%.

5.3 BIRTH INTERVALS

Median birth interval

Number of months since the preceding birth by which half of children are born

Sample: Non-first births in the 5 years before the survey

Examination of birth intervals is important in providing insights into birth spacing patterns, which in turn provides information on maternal and child health. Short birth intervals tend to increase the risks of maternal and child mortality. Findings suggest relatively short birth intervals among Syrian migrant women in Turkey; the median birth interval is 27 months. Approximately seven out of ten non-first births occur within three years after the previous birth. Nearly 38% of children are born after an interval that is considered "too short," i.e., less than 24 months.

Patterns by background characteristics

- In general, younger Syrian women have shorter birth intervals than older women. Nearly half of women age 15-19 space their births less than 18 months. While 46% of women age 20-29 space their births less than 24 months apart, only 24% of women age 30-39 do (**Table 5.5**).
- The birth interval varies markedly by the survival status of the preceding birth. The percentage of births occurring in less than 18 months is nearly 2 times higher for children whose previous sibling died than for children whose previous sibling survived (38% and 20%, respectively).
- Birth intervals do not vary much with mother's education levels. Births to mothers with no education or incomplete primary education have same intervals as births to mothers who have high school or higher education (both at 28 months).

5.4 INSUSCEPTIBILITY TO PREGNANCY

Postpartum amenorrhea

The period of time after the birth of a child and before the resumption of menstruation.

Postpartum abstinence

The period of time after the birth of a child and before the resumption of sexual intercourse.

Postpartum insusceptibility

The period of time during which a woman is considered not at risk of pregnancy either because she is postpartum amenorrheic and/or abstaining from sexual intercourse postpartum.

Median duration of postpartum amenorrhea

Calculated as the number of months after childbirth by which time half of women have begun menstruating.

Sample: Women who gave birth in the 3 years before the survey

Median duration of postpartum insusceptibility

Calculated as the number of months after childbirth by which time half of women are no longer protected against pregnancy either by postpartum amenorrhea or abstinence from sexual intercourse.

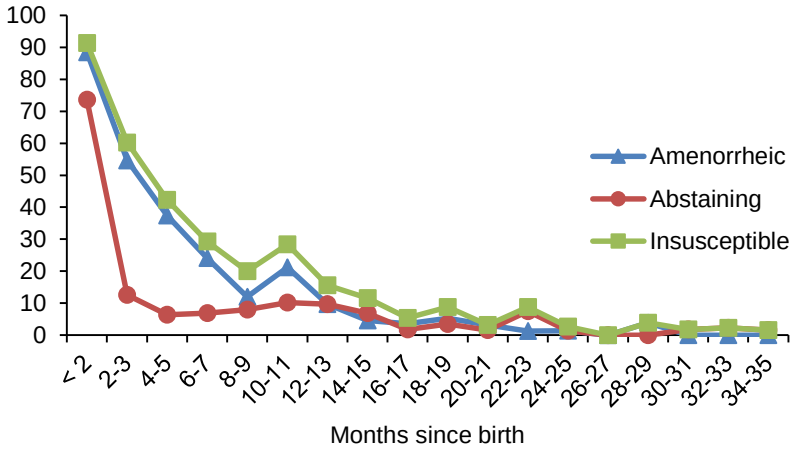
Sample: Women who gave birth in the 3 years before the survey

Overall, the median duration of postpartum amenorrhea is 4.1 months, abstinence is 2.2 months, and insusceptibility is 4.5 months among Syrian migrant women.

The results in **Table 5.6** and **Figure 5.2** show that a majority of Syrian migrant women (89%) are amenorrheic during the first 2 months following the birth, but this value decreases to 55% after the second month. Only 24% of women are amenorrheic after the 6 month. Seventy-four percent of all mothers abstained from sexual relations during first 2 months following the birth. However, starting from the second month after the birth, the contribution of abstinence to the period of insusceptibility is greatly reduced. At 2-3 months following a birth, the percentage of abstaining mothers decreases to 13% (**Figure 5.2**).

Figure 5.2 **Postpartum amenorrhea, abstinence and insusceptibility**

Percentage of births to Syrian women in the three years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible by number of months since birth



Patterns by background characteristics

- Women age 30 and above have a longer median duration of insusceptibility (5.5 months) than women under age 30 (4.3 months) (**Table 5.7**).

Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrheic and have not had a menstrual period in the 6 months before the survey, or if they report being menopausal or having had a hysterectomy, or if they have never menstruated.

Sample: Women age 30-49

Overall, 5% of Syrian migrant women age 30-49 are estimated to be menopausal (**Table 5.8**). The percentage of menopausal women increases with age, from 3% for women in their early thirties to 8% for women age 44-45.

5.5 Age at First Birth

Median age at first birth

Age by which half of women have had their first child.

Sample: Women age 20-49 and 25-49

The median age at first birth for Syrian migrant women 25-49 years old was 21.4 years (**Table 5.9**). Women over age 45 had their first birth around age 20.5 whereas women currently age 25-29 had their first birth later, at age 20.9 While 27% of women age 45-49 had their first birth by exact age 18, 23% of women age 20-29 had started childbearing by age 18.

Patterns by background characteristics

- Women age 25-49 with high school or higher level education begin childbearing about 2 years later than women with no education or incomplete primary (23.6 and 21.2 respectively) (**Table 5.10**).
- Women in camps had their first child almost one year later than women out of camps (at ages 22.1 and 21.3 years respectively).

5.6 Teenage Childbearing

Teenage childbearing

Percentage of women age 15-19 who have given birth or are pregnant with their first child

Sample: Women age 15-19

Teenage mothers are more likely to experience adverse pregnancy outcomes and maternity-related mortality than more mature women. In addition, early childbearing limits a teenager's ability to pursue educational opportunities and their access to job opportunities. Nearly 39% of Syrian migrant adolescents have started childbearing: 31% have had a live birth, and 9% is currently pregnant with their first child (**Table 5.11**). Among Syrian women age 15-19, 13% have married before age 15 and 2% gave birth to a child before age 15 (**Table 5.12**).

Patterns by background characteristics

- One out of five Syrian migrant women between age 15-17 is either a mother or pregnant with their first child. More than half of women aged 18, and two thirds of women aged 19 have begun childbearing.
- Thirty five percent of teenagers with no education or incomplete primary education had begun childbearing compared with 11% of those with high school or higher education.

LIST OF TABLES

For more information on fertility levels and some of the determinants of fertility, see the following tables:

- **Table 5.1 Current fertility**
- **Table 5.2 Fertility by education**
- **Table 5.3 Trends in age-specific fertility rates**
- **Table 5.4 Children ever born and living**
- **Table 5.5 Birth intervals**
- **Table 5.6 Postpartum amenorrhea, abstinence and insusceptibility**
- **Table 5.7 Median duration of amenorrhea, postpartum abstinence and postpartum insusceptibility**
- **Table 5.8 Menopause**
- **Table 5.9 Age at first birth**
- **Table 5.10 Median age at first birth**
- **Table 5.11 Teenage pregnancy and motherhood**
- **Table 5.12 Sexual and reproductive health behaviors before age 15**

Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the 3 years preceding the survey, by residence, Turkey DHS 2018 - Syrian Sample

Age group	Total
15-19	209
20-24	312
25-29	218
30-34	176
35-39	105
40-44	28
45-49	(13)
TFR(15-49)	5.3
GFR	203
CBR	42

Note: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months preciding the interview. Figures in parenthesis are based on 125-249 unweighted women years.
TFR: Total fertility rate expressed per woman
GFR: General fertility rate expressed per 1,000 women age 15-44
CBR: Crude birth rate, expressed per 1,000 population

Table 5.2 Fertility by education

Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, according to education, Turkey DHS 2018 - Syrian Sample

Education	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
No educ / prim. incomp.	5.8	13.1	6.2
Complete primary	5.5	13.5	5.6
Complete secondary	4.9	12.3	(4.8)
Complete high school / higher	4.1	16.5	(3.9)
Total	5.3	13.6	5.5

Note: Total fertility rates are for the period 1-36 months prior to interview. Figures in parenthesis are based on 25-49 unweighted cases.

Table 5.3 Trends in age-specific fertility rates

Age-specific fertility rates for 5-year periods preceding the survey, according to age group, Turkey DHS 2018 - Syrian Sample

	Number of years preceding survey			
Age group	0-4	5-9	10-14	15-19
15-19	184	127	117	96
20-24	289	255	281	276
25-29	233	249	289	271
30-34	178	211	242	[203]
35-39	101	124	[143]	
40-44	38	[77]		
45-49	[11]			

Note: Age-specific fertility rates are per 1,000 women. Rates exclude the month of interview. Estimates in brackets are truncated.

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born and mean number of living children, according to age group, Turkey DHS 2018 - Syrian Sample

	Number of children ever born													Mean number of	
Age	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women	children ever born	living children
ALL WOMEN															
15-19	69.4	18.6	10.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	467	0.44	0.43
20-24	24.6	25.7	31.0	14.3	3.7	0.8	0.0	0.0	0.0	0.0	0.0	100.0	476	1.49	1.45
25-29	12.5	13.2	20.4	25.8	16.8	8.1	2.7	0.4	0.0	0.0	0.0	100.0	397	2.58	2.49
30-34	11.2	6.5	13.4	19.7	22.0	12.6	8.5	2.6	2.5	1.1	0.0	100.0	326	3.42	3.29
35-39	8.3	3.2	4.9	12.9	17.2	15.2	16.4	9.6	4.4	1.9	5.9	100.0	245	4.79	4.55
40-44	7.8	2.3	4.8	7.1	12.9	19.9	16.7	12.9	8.3	3.5	3.8	100.0	183	5.14	4.78
45-49	7.4	1.7	4.0	1.7	7.7	18.7	14.4	15.5	9.4	8.0	11.5	100.0	123	6.02	5.47
Total	25.8	13.4	15.6	13.0	10.4	7.8	5.7	3.4	2.1	1.1	1.6	100.0	2,216	2.67	2.53
CURRENTLY MARRIED WOMEN															
15-19	37.0	39.7	19.7	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	216	0.90	0.88
20-24	13.6	28.9	35.6	16.8	4.1	1.0	0.0	0.0	0.0	0.0	0.0	100.0	404	1.72	1.66
25-29	6.8	13.7	21.6	27.8	17.9	8.9	3.0	0.4	0.0	0.0	0.0	100.0	361	2.77	2.67
30-34	2.8	5.4	14.2	21.7	24.1	14.6	10.1	2.9	2.9	1.3	0.0	100.0	275	3.84	3.70
35-39	3.1	3.6	5.1	13.0	18.9	16.3	16.7	10.9	5.0	2.1	5.2	100.0	216	5.02	4.76
40-44	2.3	2.1	5.0	8.4	11.2	22.2	18.5	14.0	9.8	2.7	3.9	100.0	154	5.47	5.09
45-49	3.3	2.0	2.6	2.0	7.8	19.4	13.5	17.3	9.8	9.2	13.1	100.0	107	6.43	5.83
Total	10.4	16.1	18.8	16.1	12.3	9.6	6.8	4.2	2.6	1.3	1.8	100.0	1,734	3.21	3.05

Table 5.5 Birth intervals

Percent distribution of non-first births in the 5 years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Mother's age									
15-19	47.3	24.6	19.5	6.9	1.7	0.0	100.0	61	19.2
20-29	23.2	22.6	32.4	11.8	4.8	5.1	100.0	739	24.8
30-39	12.8	11.2	29.8	16.6	9.1	20.6	100.0	460	34.2
40-49	12.0	7.5	14.3	16.0	7.5	42.8	100.0	62	49.2
Sex of preceding birth									
Male	21.1	18.1	28.2	14.1	6.5	11.9	100.0	657	27.2
Female	19.3	17.9	31.9	12.8	6.0	12.1	100.0	665	27.3
Survival of preceding birth									
Living	19.5	18.4	30.4	13.7	6.3	11.9	100.0	1,269	27.4
Dead	37.9	10.0	21.4	8.7	6.0	16.0	100.0	53	25.0
Birth order									
2-3	24.2	21.0	33.1	10.9	4.2	6.5	100.0	774	24.9
4-6	14.4	14.7	25.5	16.3	9.1	20.1	100.0	431	33.7
7+	15.1	10.6	26.6	19.6	9.4	18.7	100.0	117	32.7
Residence									
Non-camp	20.3	18.0	30.0	13.3	6.2	12.2	100.0	1,252	27.3
Camp	18.0	19.0	30.5	16.0	8.0	8.5	100.0	70	26.8
Mother's education									
No educ / prim. incomp.	21.5	17.8	28.5	12.6	5.7	13.9	100.0	253	28.1
Complete primary	18.4	16.8	31.8	13.8	7.1	12.2	100.0	673	28.5
Complete secondary	25.0	19.7	28.3	11.9	5.4	9.6	100.0	234	25.4
Complete high school / higher	18.9	21.1	27.8	15.4	5.0	11.7	100.0	162	27.5
Total	20.2	18.0	30.0	13.5	6.3	12.0	100.0	1,322	27.2

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

Table 5.6 Postpartum amenorrhea, abstinence and insusceptibility

Percentage of births in the 3 years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Turkey DHS 2018 - Syrian Sample

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrheic	Abstaining	Insusceptible[1]	
< 2	88.5	73.7	91.4	86
2-3	54.7	12.6	60.3	75
4-5	37.4	6.4	42.3	71
6-7	24.1	6.9	29.3	61
8-9	12.0	8.0	20.0	53
10-11	21.2	10.2	28.4	83
12-13	9.7	9.7	15.6	54
14-15	4.6	6.9	11.6	76
16-17	3.6	1.8	5.4	58
18-19	5.3	3.5	8.8	60
20-21	3.2	1.6	3.2	67
22-23	1.3	7.5	8.8	84
24-25	1.4	1.4	2.7	77
26-27	0.0	0.0	0.0	64
28-29	3.9	0.0	3.9	54
30-31	0.0	1.8	1.8	58
32-33	0.0	2.3	2.3	48
34-35	0.0	1.6	1.6	87
Total	16.6	9.8	20.4	1,217
Median	4.1	2.2	4.5	na
Mean	6.4	4.1	7.7	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable
[1] Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

Table 5.7 Median duration of amenorrhea, postpartum abstinence and postpartum insusceptibility

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the 3 years preceding the survey, according to mother's age, Turkey DHS 2018 - Syrian Sample

Mother's age	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility[1]
15-29	3.9	2.2	4.3
30-49	5.0	*	5.5
Total	4.1	2.2	4.5

Note: Medians are based on the status at the time of the survey (current status). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, according to age, Turkey DHS 2018 - Syrian Sample

Age	Percentage menopausal[1]	Number of women
30-34	2.7	326
35-39	3.1	245
40-41	5.3	76
42-43	4.0	62
44-45	8.1	78
46-47	(15.1)	46
48-49	(26.6)	42
Total	5.4	876

Note: Figures in parenthesis are based on 25-49 unweighted cases.
[1] Percentage of women who 1) are not pregnant, and 2) have had a birth in the past 5 years and are not postpartum amenorrheic, and 3) for whom one of the following additional conditions applies: a) whose last menstrual period occurred 6 or more months preceding the survey, or b) declared that they are in menopause or have had a hysterectomy, or c) have never menstruated.

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Turkey DHS 2018 - Syrian Sample

	Percentage who gave birth by exact age							
Current age	15	18	20	22	25	Percentage who have never given birth	Number of women	Median age at first birth
15-19	2.3	na	na	na	na	69.4	467	a
20-24	1.8	22.6	50.5	na	na	24.6	476	20.0
25-29	1.9	22.9	42.1	58.2	79.0	12.5	397	20.9
30-34	0.5	12.5	35.9	49.4	69.9	11.2	326	22.1
35-39	4.3	15.7	33.8	50.0	71.5	8.3	245	22.0
40-44	2.3	20.4	41.4	57.6	73.7	7.8	183	21.0
45-49	7.7	27.3	46.8	62.8	74.6	7.4	123	20.5
20-49	2.4	19.9	42.3	na	na	14.1	1,749	a
25-49	2.6	18.9	39.3	54.7	74.1	10.2	1,273	21.4

na = Not applicable due to censoring
a = Omitted because less than 50% of women had a birth before reaching the beginning of the age group.

Table 5.10 Median age at first birth

Median age at first birth among women age 20-49 and age 25-49 years, according to background characteristics, Turkey DHS 2018 - Syrian Sample

	Age						Women age
Background characteristic	20-24	25-29	30-34	35-39	40-44	45-49	25-49
Residence							
Non- camp	20.0	20.9	22.1	22.0	20.9	20.3	21.3
Camp	(19.9)	(20.0)	(21.1)	(22.1)	*	*	22.1
Education							
No educ / prim. incomp.	(19.6)	20.2	22.4	21.9	(21.4)	20.4	21.2
Complete primary	19.3	19.5	21.4	21.4	20.0	20.4	20.6
Complete secondary	19.9	19.9	(21.4)	(22.5)	*	*	20.7
Complete high school / higher	21.7	23.5	(23.6)	(24.5)	*	*	23.6
Total	20.0	20.9	22.1	22.0	21.0	20.5	21.4

Note: Figures in parenthesis are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, according to background characteristics, Turkey DHS 2018 - Syrian Sample

	Percentage of women age 15-19 who:		Percentage who	
Background characteristic	Have had a live birth	Are pregnant with first child	have begun childbearing	Number of women
Age				
15-17	14.5	6.0	20.5	248
15	5.1	1.7	6.7	64
16	11.5	5.2	16.6	102
17	25.5	10.2	35.8	83
18	38.4	15.3	53.8	110
19	59.4	8.2	67.6	108
Education				
No educ / prim. incomp.	23.5	11.1	34.6	86
Complete primary	39.6	9.9	49.4	247
Complete secondary	22.2	5.1	27.3	103
Complete high school / higher	(6.7)	(4.5)	(11.2)	31
Total	30.6	8.7	39.3	467

Note: Figures in parenthesis are based on 25-49 unweighted cases.

Table 5.12 Sexual and reproductive health behaviors before age 15

Among women age 15-19, percentage who were married, and had a live birth before age 15, Turkey DHS 2018 - Syrian Sample

	Married before age 15	Gave birth a child before age 15	Number
Women	13.4	2.3	467

FERTILITY PREFERENCES 6

Key Findings

- ***Desire for another child:*** Overall, 20% of currently married Syrian women age 15-49 want to have another child soon, 25% want to wait at least 2 years, and 43% want no more children or are sterilized.
- ***Limiting childbearing:*** The desire to limit childbearing rises with increasing number of living children, from 5% among married Syrian women with one living children to above 83% among Syrian women with six or more living children.
- ***Ideal family size:*** Overall, Syrian women want 3.9 children on average, while currently married Syrian women want 4.1 children.
- ***Unwanted births:*** 83% of births/current pregnancies in the 5 years before the survey were wanted at the time of conception, 6% were mistimed, and 11% were unwanted.

Information on future reproductive preferences is of considerable importance for refining and modifying current family planning policies. Insight into fertility preferences allows for an assessment of the potential unmet need for contraception. This chapter presents information on whether and when married Syrian migrant women want more children, ideal family size, whether the last birth was wanted, and the theoretical fertility rate if all unwanted births were prevented.

6.1 DESIRE FOR ANOTHER CHILD

Desire for another child

Women were asked whether they wanted more children and, if so, how long they would prefer to wait before the birth of the next child. Women who are sterilized are assumed not to want any more children.

Sample: Currently married women age 15-49

Table 6.1 shows the percent distribution of currently married Syrian women by desire for more children according to the number of living children (including any current pregnancy). The results indicate that 43% of currently married Syrian women want to limit child-bearing: 41% want no more children, and an additional 2% have been sterilized (**Figure 6.1**) Nearly half of currently married Syrian women want to have a child at some time in the future (48%), 25% of them want to wait at least two years for another child. The proportion of currently married Syrian women who are undecided about having another child is only 7%.

***Figure 6.1* Fertility preferences**

Fertility preferences of currently married Syrian women age 15-49

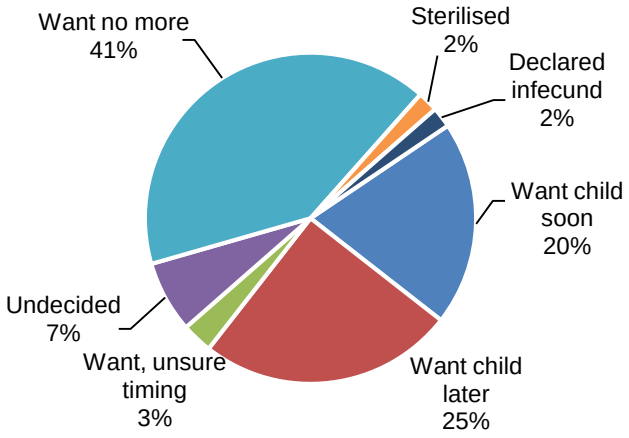
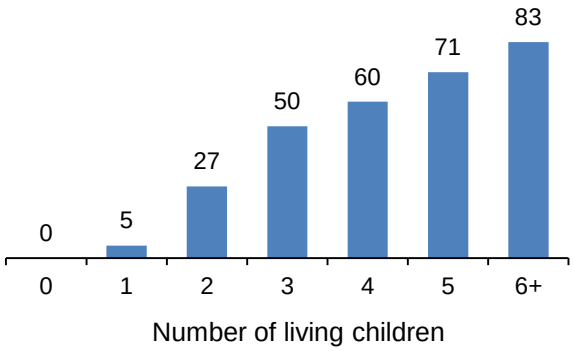


***Figure 6.2* Desire to limit childbearing by number of living children**

Percentage of currently married Syrian women age 15-49 who want no more children



The desire for more children declines noticeably as the number of living children increases. Ninety percent of currently married Syrian women with one child want to have a child in the future, whereas only 9% of women with six or more children want to have another. A strong desire to stop childbearing is evident among women who have had three living children and even increases at higher order parities (**Figure 6.2**).

Patterns by background characteristics

Table 6.2 shows the percentage of respondents who want no more children by number of living children and educational attainment. The table provides information about subgroup variations in the potential demand for fertility control.

- The desire to limit childbearing rises with number of living children, from 5% among Syrian migrant married women with one living children to 83% among Syrian women with six or more living children (**Table 6.2** and **Figure 6.2**).
- The desire to limit childbearing is proportionately higher for women who live in camps (52%) than those living outside camps (43%).
- Education is known to be negatively associated with the desire to stop childbearing, largely because better-educated women tend to be younger and still in the early stages of the family-building process. The results conform to this pattern, with the proportion of Syrian women who desire to stop childbearing decreasing as the level of education increases. Thus, 52% of currently married Syrian women having no education or incomplete primary want to stop childbearing, compared with 33% of those who have high school or higher education.

6.2 IDEAL FAMILY SIZE

Ideal family size

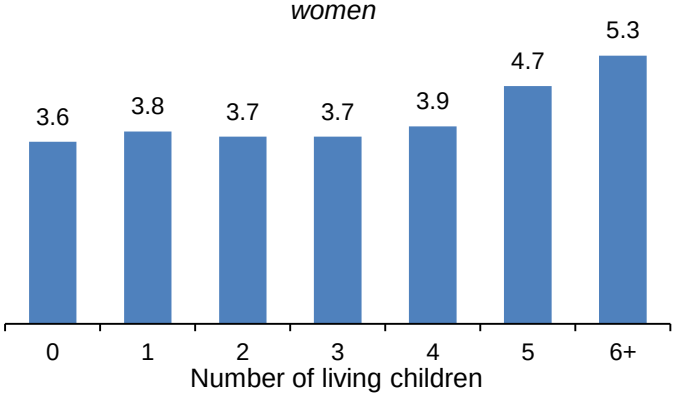
Respondents with no children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" Respondents who had children were asked: "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?"

Sample: Women age 15-49

Table 6.3 shows the distribution of all Syrian women by their ideal number of children and mean ideal number of children according to actual number of living children. The mean ideal number of children increases with actual number of children, except for a small decrease between parity 1 and parity 2.

***Figure 6.3* Ideal family size by number of living children**

Mean ideal number of children of currently married Syrian women



Thirty-seven percent of the respondents stated 4 children as the ideal number, while only 14% of Syrian women consider 2 children as ideal. Among all Syrian women age 15-49 and those who are currently married the mean ideal family size is 3.9 and 4.1 children, respectively. Currently married Syrian women with 6 or more children have a mean ideal family size of 5.3 children, compared with 3.6 children for Syrian women do not have any children. Among those with 2 children or 3 children, ideal number of children is same (3.7) (**Figure 6.3**).

Patterns by background characteristics

- The mean ideal number of children does not vary significantly by age except among women age 45-49, where the mean is the highest (5.2).
- The mean ideal number of children declines as education increases. The difference between Syrian women with no education or incomplete primary and those who have high school or higher education is almost one child (4.4 and 3.6 children, respectively).

6.3 FERTILITY PLANNING STATUS

Planning status of births/pregnancies

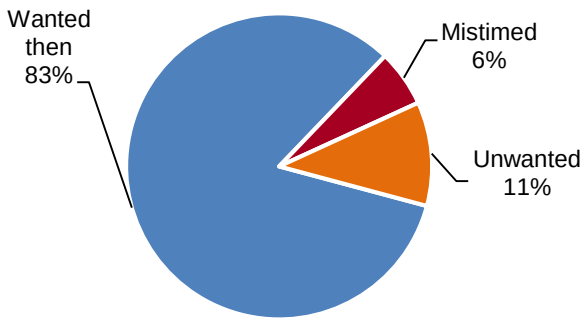
Women reported whether their births/pregnancies were wanted at the time (planned birth), at a later time (mistimed birth), or not at all (unwanted birth).

Sample: Current pregnancies and births in the 5 years before the survey to women age 15-49

Table 6.5 and **Figure 6.4** shows the percent distribution of births in the five years preceding the survey and current pregnancies by whether the birth (pregnancy) was wanted by the mother then, wanted later, or not wanted at all, according to birth order and age of mother at birth. Overall, 83% of births in the five-year period preceding the survey were planned, 6% were mistimed, and 11% were unwanted.

***Figure 6.4* Fertility planning status**

Percent distribution of births to women age 15-49 in the 5 years before the survey (including current pregnancies) by planning status of births



Patterns by background characteristics

- **Table 6.5** shows that, in general, the proportion of unwanted births increases sharply with increasing birth order, ranging from 1% of first births to 27% of fourth and higher births.
- As the mother's age increases, the percentage of children that are unwanted also increases. Only 2% of births to Syrian women age under 20 are unwanted, compared with 37% and higher among births of women age 35-39 and higher. The percentage of mistimed births is highest among Syrian women age 25-29 (7%) and drops off among Syrian women age 35 and older.

6.4 Wanted Fertility Rates

Unwanted birth

Any birth in excess of the number of children a woman reported as her ideal number.

Wanted birth

Any birth fewer than or equal to the number of children a woman reported as her ideal number.

Wanted fertility rate

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates, excluding unwanted births.

Sample: Women age 15-49

Another approach to measuring the extent of unwanted fertility is to compare the total wanted fertility rate (TWFR) with the total fertility rate (TFR). A birth is considered wanted if the number of living children at the time of conception was less than the ideal number of children reported at the time of the survey. **Table 6.6** shows that, the total wanted fertility rate for Syrian women is 4.2 children, which is 21% less than the actual total fertility rate of 5.3 children. In other words, if all unwanted births were prevented, the TFR for Syrian women would be 1.1 children less than the observed level.

Patterns by background characteristics

- The difference between wanted and actual fertility is considerably smaller among women with high school or higher education (0.7 children) than among women in the other education groups (1.2-1.3 children) (**Table 6.6**).

LIST OF TABLES

For more information on fertility preferences, see the following tables:

- **Table 6.1 Fertility preferences by number of living children**
- **Table 6.2 Desire to limit childbearing**
- **Table 6.3 Ideal number of children by number of living children**
- **Table 6.4 Mean ideal number of children**
- **Table 6.5 Fertility planning status**
- **Table 6.6 Wanted fertility rates**

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women age 15-49 by desire for children, according to number of living children, Turkey DHS 2018 - Syrian Sample

	Number of living children[1]							
Desire for children	0	1	2	3	4	5	6+	Total 15-49
Have another soon[2]	79.7	31.4	23.5	11.2	10.7	7.1	4.8	20.1
Have another later[3]	10.2	52.8	35.9	24.9	16.8	7.2	3.6	24.7
Have another, undecided when	5.5	5.8	3.9	3.2	2.4	3.2	0.4	3.4
Undecided	1.9	3.4	8.1	9.6	8.1	7.8	4.8	6.7
Want no more	0.0	4.8	27.4	49.7	58.6	66.4	74.9	41.2
Sterilised[4]	0.0	0.0	0.0	0.7	1.3	4.8	7.8	1.9
Declared infecund	2.8	1.9	1.2	0.7	2.2	3.5	3.6	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	115	280	359	305	252	162	261	1,734

[1] The number of living children includes the current pregnancy
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilization

Table 6.2 Desire to limit childbearing

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Turkey DHS 2018 - Syrian Sample

	Number of living children[1]							
Background characteristic	0	1	2	3	4	5	6+	Total
Residence								
Non- camp	0.0	4.6	27.4	51.1	60.2	71.1	82.1	42.8
Camp	*	*	*	(35.9)	(52.6)	(73.1)	(92.7)	51.8
Education								
No educ / prim. incomp.	*	(3.7)	(30.5)	(51.5)	64.4	(69.8)	79.1	52.0
Complete primary	0.0	5.8	29.5	46.8	60.5	71.3	87.3	45.8
Complete secondary	(0.0)	3.4	25.2	44.1	(64.5)	(75.4)	*	34.3
Complete high school / higher	*	4.6	21.7	66.7	(46.2)	*	*	33.3
Total	0.0	4.8	27.4	50.4	59.8	71.2	82.7	43.1

Note: Women who have been sterilized are considered to want no more children. Figures in parenthesis are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] The number of living children includes the current pregnancy

Table 6.3 Ideal number of children by number of living children

Percent distribution of women age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to the number of living children, Turkey DHS 2018 - Syrian Sample

Ideal number of children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
0	4.4	1.4	5.8	7.7	11.4	7.4	8.9	6.3
1	1.6	0.7	1.2	2.7	1.2	0.6	0.4	1.3
2	24.1	20.5	18.0	7.9	8.0	7.7	3.3	14.4
3	13.0	18.9	14.7	19.1	4.6	6.5	3.8	12.3
4	38.6	35.2	41.1	41.2	41.5	25.9	27.1	36.9
5	4.5	9.2	6.4	13.9	13.9	19.5	4.7	9.1
6+	8.3	12.3	11.4	5.7	18.3	30.5	47.4	16.8
Non-numeric responses	5.6	1.8	1.4	1.8	1.1	1.8	4.5	2.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	501	304	377	316	267	173	278	2,216
Mean ideal number of children for:[2]								
All	3.4	3.8	3.6	3.6	3.9	4.7	5.4	3.9
Number	473	298	372	311	264	170	265	2,153
Currently married	3.6	3.8	3.7	3.7	3.9	4.7	5.3	4.1
Number of currently married	114	277	353	300	249	159	251	1,702

[1] The number of living children includes current pregnancy for women
[2] Means are calculated excluding respondents who gave non-numeric responses.

Table 6.4 Mean ideal number of children

Mean ideal number of children for all women age 15-49, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Mean	Number of women[1]
Age		
15-19	3.6	442
20-24	3.8	463
25-29	3.9	393
30-34	4.0	321
35-39	4.1	237
40-44	4.2	178
45-49	5.2	118
Residence		
Non- camp	3.9	2,066
Camp	4.0	87
Education		
No educ / prim. incomp.	4.4	403
Complete primary	4.0	1,024
Complete secondary	3.7	425
Complete high school / higher	3.6	301
Total	3.9	2,153

[1] Number of women who gave a numeric response

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the 5 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Turkey DHS 2018 - Syrian Sample

	Planning status of birth					
Birth order and mother's age at birth	Wanted then	Wanted later	Wanted no more	Missing	Total	Number of births
Birth order						
1	98.2	0.8	0.8	0.2	100.0	654
2	87.0	9.2	3.7	0.2	100.0	549
3	79.4	8.8	11.8	0.0	100.0	364
4+	66.2	6.1	27.4	0.3	100.0	637
Mother's age at birth						
<20	93.4	5.0	1.6	0.0	100.0	533
20-24	86.4	6.4	6.9	0.3	100.0	727
25-29	82.6	6.5	10.5	0.4	100.0	486
30-34	69.8	6.0	24.2	0.0	100.0	299
35-39	60.8	2.6	36.6	0.0	100.0	124
40-44	(55.2)	(1.1)	(43.6)	(0.0)	(100.0)	31
45-49	*	*	*	*	*	3
Total	83.1	5.7	11.0	0.2	100.0	2,204

Note: Figures in parenthesis are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, according to education, Turkey DHS 2018 - Syrian Sample

Education	Total wanted fertility rates	Total fertility rate
No educ / prim. incomp.	4.5	5.8
Complete primary	4.3	5.5
Complete secondary	3.7	4.9
Complete high school / higher	3.4	4.1
Total	4.2	5.3

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

FAMILY PLANNING 7

Key Findings

- ***Contraceptive knowledge:*** Knowledge of at least one family planning method is widespread among Syrian women in Turkey. Almost all currently married women age 15-49 have heard of a method of family planning (99%).
- ***Contraceptive use:*** Overall, 43% of currently married women use a method of family planning. The most commonly used method is the withdrawal (18%), followed by the IUD (13%), and the pill (6%).
- ***Future use of contraception:*** 39% of currently married women who are not using contraception intend to use family planning at some future time. On the other hand, approximately half of the women do not intend to use contraceptives in the future.
- ***Sources of modern methods*:** An almost equal percentage of modern contraceptive users obtain their method from the public sector (39%) and private medical sector (38%). The remaining 23% reported using other sources, particularly migrant health center (17%).
- ***Contraceptive discontinuation*:** One out of three times (35%) contraceptive users stop using a contraceptive method within 12 months of starting use. The most common reason for discontinuations was the desire to become pregnant (38%), followed by side effects/health concerns (21%) and method failure (15%).
- ***Unmet need for family planning:*** 21% of currently married women have an unmet need for family planning; that is, they want to space or limit births but are not currently using contraception.
- ***Demand for family planning:*** Only 38% of the total demand for family planning is satisfied by modern methods.

Couples can use contraceptive methods to limit or space the number of children they have. This chapter presents information on the knowledge, use, and sources of contraceptive methods and rates and reasons for discontinuing contraceptives. For Syrian women in Turkey, it also examines the need for family planning and the demand for family planning that is satisfied. In addition, it provides information on decision-making about family planning, timing of sterilization, and future use of contraception.

The use of family planning helps women avoid unintended and untimely pregnancies, and reduces risks of unsafe abortions. Contraceptives help women space the births of their children, which directly benefits the health of the mother and infants.

7.1 Contraceptive Knowledge

Knowledge of contraceptive methods is almost universal among currently married Syrian refugee women living in Turkey, with virtually all (99%) currently married women knowing at least one method of contraception. On average, women have heard of six methods (**Table 7.1**). The most commonly known method among currently married women is the IUD (98%), the pill (97%), injectables (80%), female sterilization (76%) and male condom (72%). Knowledge of implants (22%), male sterilization and diaphragm/foam/jelly (14% each), female condom (11%) and vaginal ring (7%) are relatively poor among currently married women.

Although withdrawal is the most commonly used method among Syrian refugee women in Turkey, 77% of all women and 89% of currently married women declared that they heard this method.

Knowledge of contraceptive methods does not vary by all background characteristics among women. For more information about differentials in knowledge of any method and any modern method by background characteristics, see **Table 7.2**.

7.2 Ever Use of Contraceptive Methods

Overall, 71% of currently married women and 58% of all women have used a family planning method at some time (**Table 7.3**). When comparing all women with currently married women, results show that ever use of modern methods (54%) and traditional methods (47%) are higher among currently married women than all women (45% and 38%, respectively). The methods most commonly ever used by currently married women are withdrawal (46%), IUD (34%), the pill (33 percent) and male condom (13%). A similar pattern is evident for all women; however, the percentages are slightly lower for all women.

Regarding age groups, results indicate a positive relationship between age and ever use of contraceptive method for both all women and currently married women. The percentage of ever use increases with increasing age for both all women and currently married women except for a slight decline between the 35-39 and 40-44 age groups.

7.3 Current Use of Contraceptive Methods

Contraceptive prevalence rate
Percentage of women who use any contraceptive method
Sample: All women age 15-49, and currently married women age 15-49

Overall, the contraceptive prevalence rate is 43% among currently married women age 15-49, with 24% using modern contraceptive methods and 19% using traditional methods. Use of a modern family planning method rises with age of currently married women until the 35-39 age group (35%) before declining among women age 40-44 and 45-49 (34% and 23%, respectively) (**Table 7.4**).

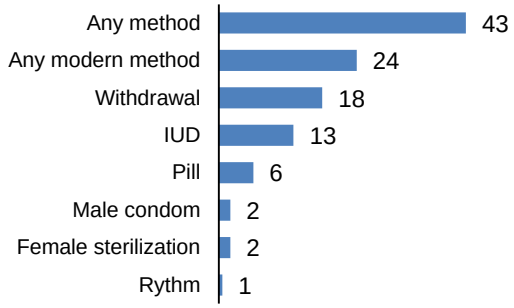
Modern methods

Include male and female sterilization, injectables, intrauterine devices (IUDs), contraceptive pills, implants, female and male condoms, lactational amenorrhea method, and emergency contraception

Among currently married women, the withdrawal is the most commonly used method (18%), followed by IUD (13%) and the pill (6%) (**Figure 7.1**).

***Figure 7.1* Contraceptive use**

Percentage of currently married Syrian women age 15-49 currently using a contraceptive method



Patterns by background characteristics

- Modern contraceptive use increases with number of living children, with 37% of currently married women with five or more children using a modern method, compared with less than 1% for women with no education (**Table 7.5**).
- There is only a slight difference among women living in the non-camp residences and camp residences in the use of modern contraceptive method, 24% and 23% respectively. Use of traditional methods is substantially higher among women living in camps than those living in non-camp residences, mainly due to the greater use of withdrawal (26% among women residing in camp versus 18% among those in non-camp residences).
- Contraceptive use is the lowest among women who never attended school or did not complete primary school (40%) and then rises to 44% among women with high school or higher education. However, modern contraceptive use is the lowest (20%) and traditional method use is the highest among women with high school or higher education (24%).

7.3.1 Knowledge of the Fertile Period

The survey collected data on women's knowledge of the fertile period. **Table 7.6** shows that approximately 32% of women correctly report that a woman is most at risk of pregnancy if she has intercourse halfway between two menstrual periods. Twenty-six percent of women incorrectly believe that a woman is more likely to conceive immediately after her menstrual cycle has ended, 15% say there is no specific fertile period, and 26% of women report that they do not know when the fertile period is. Women age 15-19 have the lowest correct knowledge of fertile period (16%) compared to women from older age groups (range 31%-42%) (**Table 7.7**).

7.4 Source of Modern Contraceptive Methods

Source of modern contraceptives

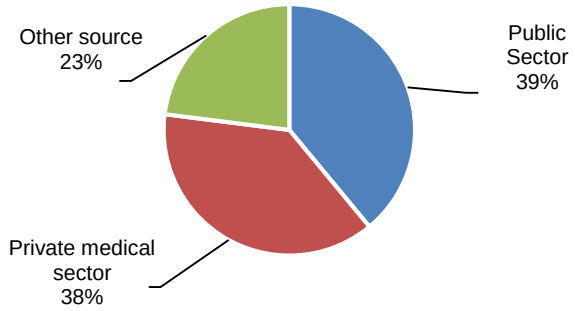
The place where the modern method currently being used was obtained the last time it was acquired

Sample: Women age 15-49 currently using a modern contraceptive method

Information on current sources of modern contraceptive methods is critical for planning and program implementation. An almost equal percentage of modern contraceptive users obtain their method from the public sector (39%) and private medical sector (38%). Public hospitals provide the most services (18%) in the public sector. Private doctors provide the most services (20%) in the private medical sector. Other sources, including migrant health centers provide contraceptive methods to another 23% of users (**Table 7.8** and **Figure 7.2**). The share of the private sector for the provision of pill (43%) is higher compared with the share of the public sector (32%). For the most widely used method, IUD, the source was equal between the public sector and private sector, 39% each.

***Figure 7.2* Source of modern contraceptive methods**

Percent distribution of current users of modern methods age 15-49 Syrian women by most recent source of method



7.5 DISCONTINUATION OF CONTRACEPTIVES

Contraceptive discontinuation rate

Percentage of contraceptive use episodes discontinued within 12 months

Sample: Episodes of contraceptive use in the 5 years before the survey, experienced by women who are currently age 15-49 (one woman may contribute more than one episode)

Among all contraceptive use episodes in the 5 years before the survey, more than one-third (35%) were discontinued within 12 months. Discontinuation rates for the three most commonly used methods; withdrawal, the IUD and the pill were 35%, 18% and 53% respectively (**Table 7.9**). The most common reason for discontinuation was the desire to become pregnant (38%), followed by side effects/health concerns (21%), method failure (15%), and the desire for a more effective method (5%) (**Table 7.10**). The most common reason for discontinuation of IUDs was the desire to become pregnant (38%), followed by the side effects/health concerns (36%). The primary reason women discontinued use of withdrawal was the desire to become pregnant (48%), followed by method failure (25%). For the pills, the most common reason for discontinuation was side effects/health concerns (36%) followed by the desire to become pregnant (25%) and method failure (10%).

Overall, 7% of currently married women who started contraceptive use in the 5 years preceding the survey switched to another method within 12 months (**Table 7.9**).

7.6 DEMAND FOR FAMILY PLANNING

Unmet need for family planning

Proportion of women who (1) are not pregnant and not postpartum amenorrheic and are considered fecund and want to postpone their next birth for 2 or more years or stop childbearing altogether but are not using a contraceptive method, or (2) have a mistimed or unwanted current pregnancy, or (3) are postpartum amenorrheic and their last birth in the last 2 years was mistimed or unwanted.

Sample: Currently married women age 15-49

Demand for family planning:

Unmet need for family planning
+ current contraceptive use (any method)

Proportion of demand satisfied:

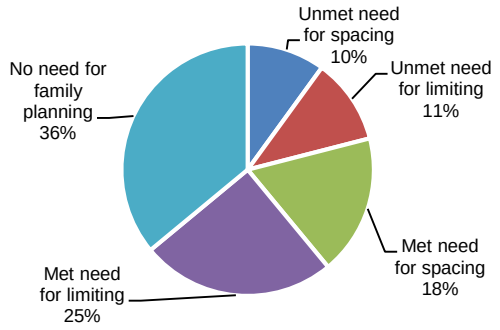
$$\frac{\text{Current contraceptive use (any method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Proportion of demand satisfied by modern methods:

$$\frac{\text{Current contraceptive use (any modern method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

The total demand for family planning among currently married women age 15-49 is 64% where 28% of women want to space births, and 36% want to limit births (**Table 7.11** and **Figure 7.3**). Forty-three percent of married women are already using a contraceptive method either to space (18%) or to limit (25%) births; that is, their family planning need is met. An additional 21% have an unmet need for family planning (10% for spacing and 11% for limiting) but are not using contraception. Overall, 38% of the demand for family planning is satisfied through use of modern methods.

***Figure 7.3* Demand for family planning**
Percent distribution of currently married Syrian women age 15-49 by need for family planning



Patterns by background characteristics

- The proportion of married women with an unmet need for spacing births is highest among those age 15-19 (18%) compared to less than 5% for women age 40-49, while unmet need for limiting births is highest among women age 45-49 and (31%) compared to 3% for women 15-19 (**Table 7.11**).
- Unmet need among women living in the non-camp residence (21%) is slightly higher than those living in the camp residences (17%). This difference is mainly being attributed to the high level of unmet need for spacing among women living in the non-camp residences.
- Unmet need is almost at the same level for women in different educational levels, at around 19-22%. On the other hand, total demand for family planning increases with the educational level of women, from 61% for women with no education or less than primary education to 66% for women with high school or higher education.

7.6.1 Decision Making about Family Planning

Table 7.12 provides information on family planning decision making among current users and nonusers. Eighty-five percent of users report that the decision to use a method was made jointly with their husband, 12% stated that it is mainly made by themselves, and only 2% said that the decision is mainly made by their husbands. The same pattern is observed for those who are not using any contraceptive method. Approximately 83% of the women reported that the decision not to use contraception is made jointly with their husbands, 13% stated that it is mainly decided by themselves, and 3% said that it is mainly decided by their husbands. Among users, the highest proportion saying that their husband mainly decided about use of family planning was found among women with no education or incomplete primary (8%).

7.6.2 Future Use of Contraception

The survey collected information about nonusers' intention to use contraception. Thirty-nine percent of currently married women who were not using a contraceptive method declared that they intended to use contraception in the future. Almost half reported that they did not intend to use one in the future (50%). The proportion of women who reported that they did not intend to use a contraceptive method was highest among those with no living children (67%). Women with three living children had the highest level of intention to use contraception at some future time (54%) (**Table 7.13**).

7.6.3 Preferred Method of Contraception for Future Use

The 2018 TDHS also obtained information from non-users who intended to use a method in the future on the contraceptive method they would prefer to use. The IUD (49%) is by far the most popular method among these nonusers, followed by withdrawal (21%), the pill (17%) and male condoms (4%) (**Table 7.14**). Method preferences vary with age of women, non-users younger than 30 more often refer withdrawal than non-users age at 30 and over (24% and 12% respectively), whereas non-users age at 30 and over more widely prefer female sterilization than non-users younger than 30 (7% and 1% respectively). Furthermore, non-users age at 30 and over are more prevalently prefer other traditional methods than non-users younger than 30 (5% and 1% respectively).

7.6.4 Exposure to Family Planning Messages in the Media

Table 7.15 offers information on Syrian refugee women's exposure to family planning messages in the media. Most of the women (94%) declared that they have no exposure to family planning messages in any of the four types of mass media (radio, television, print media, and the Internet). Only 5% of women reported hearing a family planning message in the past few months on television. Exposure to family planning messages through radio, print media such as newspapers, magazines, posters, bulletins, or booklets and mobile phone appears to be limited at around (3%).

The percentages of women exposed to family planning messages in any of the four types of mass media do not vary by age of women and residence type. However, women exposed to family planning messages are most often found among those with high school or higher education (12%) compared with other educational groups (4-6%).

LIST OF TABLES

For more information on family planning, see the following tables:

Table 7.1 Knowledge of contraceptive methods

Percentage of women, all women and currently married women 15-49 who know any contraceptive method, by specific method, Turkey DHS 2018 - Syrian Sample

Method	All women	Currently married women
Any method	94.5	99.1
Any modern method	94.3	98.8
Female sterilization	68.3	76.3
Male sterilization	11.9	13.8
Pill	91.1	97.2
IUD	92.3	97.9
Injectables	71.3	79.7
Implants	18.3	21.5
Male condom	61.4	72.2
Female condom	9.2	10.8
Diaphragm/foam/jelly	11.7	13.5
Vaginal ring	5.8	6.6
Emergency contraception	8.5	10.1
Any traditional method	78.1	90.6
Rhythm	35.6	41.9
Withdrawal	76.8	89.4
Other traditional method	0.3	0.4
Mean number of methods known by respondents 15-49	5.6	6.3
Number of women	2,216	1,734

Table 7.2 Knowledge of contraceptive methods according to background characteristics

Percentage of currently married women age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method by background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Heard of any method	Heard of any modern method[1]	Number of women
Age			
15-19	97.6	96.6	216
20-24	98.4	97.9	404
25-29	99.7	99.4	361
30-34	100.0	100.0	275
35-39	99.0	99.0	216
40-44	100.0	100.0	154
45-49	99.0	99.0	107
Residence			
Non- camp	99.0	98.7	1,667
Camp	100.0	100.0	67
Education			
No educ. / prim. incomp.	97.8	97.1	331
Complete primary	99.0	98.9	838
Complete secondary	100.0	99.4	327
Complete high school / higher	100.0	100.0	238
Total	99.1	98.8	1,734

[1] Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, vaginal ring, and other modern methods

Table 7.3 Ever use of contraception by age

Percentage of all women and currently married women 15-49 by contraceptive method currently used, according to age, Turkey DHS-2018 - Syrian Sample

			Modern method											Traditional methods				
Age	Any method	Any modern method	Female sterile-zation	Male sterile-zation	Pill	IUD	Injec-tables	Implants	Male condom	Female condom	Diaph-ragm/ foam/ jelly	Vaginal ring	Emerg. contra.	Any tradi-tional method	Rhythm	With-drawal	Other trad. method	Number of women
ALL WOMEN																		
15-19	15.1	8.6	0.0	0.2	3.6	3.2	0.0	0.0	2.0	0.0	0.0	0.0	0.0	10.1	0.0	10.1	0.0	467
20-24	52.9	30.8	0.0	0.0	15.0	14.0	0.7	0.0	11.1	0.2	0.2	0.0	0.2	39.8	3.8	39.1	0.2	476
25-29	71.1	54.3	0.2	0.0	33.9	33.8	3.3	0.0	13.0	0.0	0.5	0.0	0.4	47.9	3.3	47.1	0.0	397
30-34	76.8	60.1	2.8	0.0	34.6	39.5	5.9	0.0	12.5	0.0	1.0	0.0	0.3	48.0	8.2	46.1	0.0	326
35-39	79.6	67.6	3.2	0.0	47.2	46.1	7.3	0.0	13.5	0.9	2.3	0.0	0.0	49.3	4.7	48.0	0.0	245
40-44	78.8	70.7	4.2	0.6	49.3	52.6	10.2	0.6	15.0	0.0	2.0	0.6	0.0	50.3	9.4	47.9	0.6	183
45-49	81.4	75.1	9.4	0.0	48.2	54.8	4.6	0.0	12.9	0.0	1.7	0.3	0.0	44.2	9.8	41.6	0.0	123
Total	58.4	44.5	1.7	0.1	27.1	28.0	3.5	0.0	10.4	0.1	0.8	0.1	0.2	38.4	4.4	37.3	0.1	2,216
CURRENTLY MARRIED WOMEN																		
15-19	32.1	18.1	0.0	0.5	7.9	6.4	0.0	0.0	4.4	0.0	0.0	0.0	0.0	21.8	0.0	21.8	0.0	216
20-24	61.0	35.7	0.0	0.0	17.1	16.2	0.8	0.0	12.9	0.3	0.3	0.0	0.3	45.6	4.4	44.8	0.3	404
25-29	76.4	57.9	0.2	0.0	36.1	35.3	3.6	0.0	14.3	0.0	0.6	0.0	0.4	52.1	3.6	51.1	0.0	361
30-34	84.9	67.1	3.3	0.0	38.3	43.4	7.0	0.0	14.4	0.0	1.1	0.0	0.4	53.5	9.7	51.2	0.0	275
35-39	85.6	72.7	3.1	0.0	52.1	50.0	7.5	0.0	15.0	1.0	2.6	0.0	0.0	53.6	4.6	52.2	0.0	216
40-44	83.1	74.9	4.3	0.7	53.0	56.9	12.1	0.7	16.5	0.0	2.3	0.7	0.0	55.5	11.2	52.7	0.7	154
45-49	86.2	79.0	10.8	0.0	52.1	58.7	5.2	0.0	13.8	0.0	2.0	0.3	0.0	48.6	10.2	45.6	0.0	107
Total	71.0	53.9	2.0	0.1	33.0	33.7	4.4	0.1	13.0	0.2	1.0	0.1	0.2	47.3	5.5	45.9	0.1	1,734

Table 7.4 Current use of contraception by age

Percent distribution of all women, currently married women, age 15-49 by contraceptive method currently used, according to age, Turkey DHS 2018 - Syrian Sample

			Modern method						Traditional method					
Age	Any method	Any modern method	Female sterili-zation	Pill	IUD	Inject-ables	Male condom	Diaphragm	Any tradi-tional method	Rhythm	With-drawal	Not currently using	Total	Number of women
ALL WOMEN														
15-19	9.8	4.3	0.0	0.9	3.2	0.0	0.2	0.0	5.5	0.0	5.5	90.2	100.0	467
20-24	28.8	12.9	0.0	2.7	7.9	0.0	2.2	0.0	15.9	0.2	15.7	71.2	100.0	476
25-29	42.3	23.4	0.1	6.1	13.8	0.5	2.8	0.0	18.9	1.1	17.8	57.7	100.0	397
30-34	43.4	28.1	2.8	7.2	15.3	0.6	2.2	0.0	15.3	0.6	14.7	56.6	100.0	326
35-39	51.4	31.3	3.2	9.5	15.5	0.9	1.9	0.4	20.1	0.0	20.1	48.6	100.0	245
40-44	48.2	28.9	4.2	9.8	11.9	0.6	2.3	0.0	19.3	1.7	17.6	51.8	100.0	183
45-49	35.8	20.3	8.6	2.0	8.9	0.0	0.0	0.9	15.5	0.0	15.5	64.2	100.0	123
Total	33.9	19.0	1.6	4.9	10.3	0.3	1.7	0.1	14.9	0.5	14.4	66.1	100.0	2,216
CURRENTLY MARRIED WOMEN														
15-19	20.7	8.8	0.0	2.0	6.4	0.0	0.5	0.0	11.9	0.0	11.9	79.3	100.0	216
20-24	33.9	15.2	0.0	3.2	9.3	0.0	2.6	0.0	18.7	0.3	18.5	66.1	100.0	404
25-29	46.5	25.7	0.1	6.7	15.2	0.6	3.1	0.0	20.8	1.2	19.6	53.5	100.0	361
30-34	51.5	33.3	3.3	8.6	18.2	0.8	2.6	0.0	18.1	0.8	17.4	48.5	100.0	275
35-39	57.9	35.1	3.1	10.8	17.6	1.0	2.1	0.5	22.8	0.0	22.8	42.1	100.0	216
40-44	56.4	33.5	4.3	11.6	14.1	0.7	2.7	0.0	22.9	2.1	20.8	43.6	100.0	154
45-49	40.9	23.2	9.8	2.3	10.2	0.0	0.0	1.0	17.7	0.0	17.7	59.1	100.0	107
Total	43.1	24.1	1.9	6.3	13.1	0.4	2.2	0.1	19.0	0.6	18.4	56.9	100.0	1,734

Table 7.5 Current use of contraception according to background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Any method	Modern method							Any traditional method	Traditional method			Total	Number of women
		Any modern method	Female sterilization	Pill	IUD	Injectables	Male condom	Diaphragm		Rhythm	Withdrawal	Not currently using		
Number of living children														
0	2.3	0.6	0.0	0.6	0.0	0.0	0.0	0.0	1.7	0.6	1.1	97.7	100.0	184
1-2	34.3	15.5	0.0	2.6	10.7	0.2	2.0	0.0	18.9	0.3	18.5	65.7	100.0	630
3-4	56.6	33.1	1.0	9.9	18.2	0.2	3.7	0.0	23.5	1.0	22.5	43.4	100.0	517
5+	58.2	36.7	7.0	10.0	16.2	1.3	1.7	0.5	21.5	0.5	21.0	41.8	100.0	403
Residence														
Non- camp	42.9	24.1	1.9	6.3	13.2	0.4	2.1	0.1	18.8	0.6	18.1	57.1	100.0	1,667
Camp	48.2	22.5	2.6	4.7	11.0	0.0	4.2	0.0	25.7	0.0	25.7	51.8	100.0	67
Education														
No educ. / prim. incomp.	39.8	24.2	4.5	7.2	10.5	0.3	1.1	0.6	15.5	0.0	15.5	60.2	100.0	331
Complete primary	43.1	25.4	1.8	7.0	14.0	0.6	2.0	0.0	17.7	0.1	17.6	56.9	100.0	838
Complete secondary	46.0	23.5	0.6	4.1	15.6	0.0	3.1	0.0	22.6	0.7	21.9	54.0	100.0	327
Complete high school / higher	43.5	19.9	0.4	5.5	10.0	0.4	3.5	0.0	23.6	3.1	20.5	56.5	100.0	238
Total	43.1	24.1	1.9	6.3	13.1	0.4	2.2	0.1	19.0	0.6	18.4	56.9	100.0	1,734

Note: If more than one method is used, only the most effective method is considered in this tabulation.

Table 7.6 Knowledge of fertile period

Percent distribution of all women age 15-49 by knowledge of the fertile period during the ovulatory cycle, Turkey DHS 2018

Perceived fertile period[1]	All women
Just before her menstrual period begins	1.1
During her menstrual period	0.2
Right after her menstrual period has ended	25.6
Halfway between two menstrual periods	31.7
No specific time	15.1
Don't know	26.4
Total	100.0
Number of women	2,216

[1]Menstruational cycle card was used during the interview. See the card at 2018 TDHS Final Report Appendix E (HUIPS, 2019).

Table 7.7 Knowledge of fertile period by age

Percentage of women age 15-49 with correct knowledge of the fertile period during the ovulatory cycle, according to age, Turkey DHS 2018 - Syrian Sample

Age	Percentage with correct knowledge of the fertile period	Number of women
15-19	15.6	467
20-24	31.3	476
25-29	38.0	397
30-34	35.1	326
35-39	42.4	245
40-44	37.0	183
45-49	36.6	123
Total	31.7	2,216

Note: Correct knowledge of the fertile period is defined as "halfway between two menstrual periods."

Table 7.8 Source of modern contraceptive methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Turkey DHS 2018 - Syrian Sample

Source	Female sterilization	IUD	Injec-tables	Pill	Male condom	Diaphragm / foam / jelly	Total
Public sector	**(74.2)**	**39.2**	*****	**31.7**	**(27.3)**	*****	**39.0**
Public hospital	(41.6)	24.4	*	1.9	(5.5)	*	18.0
Maternity house	(14.8)	2.9	*	0.0	(0.0)	*	2.8
Training and research hospital	(14.8)	2.3	*	0.0	(0.0)	*	2.5
City hospital	(0.0)	0.0	*	0.0	(0.0)	*	0.0
Family practice	(0.0)	1.8	*	7.7	(2.7)	*	3.3
Family health center	(3.0)	5.4	*	20.0	(12.7)	*	10.0
Community health center	(0.0)	2.3	*	1.9	(6.4)	*	2.3
Private medical sector	**(25.8)**	**38.6**	*****	**42.8**	**(35.5)**	*****	**38.2**
Private doctor	(0.0)	33.0	*	4.8	(0.0)	*	19.7
Private hospital or clinic	(25.8)	5.1	*	1.0	(0.0)	*	5.2
Pharmacy	(0.0)	0.5	*	37.0	(35.5)	*	13.3
Other source	**(0.0)**	**22.3**	*****	**25.6**	**(37.2)**	*****	**22.9**
University hospital	(0.0)	0.0	*	0.0	(0.0)	*	0.0
Voluntary organization/foundation hospital/clinic	(0.0)	0.0	*	0.0	(0.0)	*	0.0
Market/shop	(0.0)	0.0	*	7.8	(13.6)	*	3.3
Migrant health center	(0.0)	17.5	*	17.8	(20.9)	*	16.8
Other	(0.0)	4.8	*	0.0	(2.7)	*	2.8
Missing	(0.0)	0.0	*	0.0	(0.0)	*	0.0
Total	(100.0)	100.0	*	100.0	(100.0)	*	100.0
Number of women	36	228	7	109	39	2	421

Note: Total includes other modern methods but excludes lactational amenorrhea method (LAM). Figures in parenthesis are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.9 Twelve-month contraceptive discontinuation rates

Among episodes of contraceptive use experienced within the 5 years preceding the survey, percentage of episodes discontinued within 12 months, according to reason for discontinuation and specific method, Turkey DHS 2018 - Syrian Sample

Method	Method failure	Desire to become pregnant	Other fertility related reasons[1]	Side effects/health concerns	Wanted more effective method	Other method related reasons[2]	Other reasons	Any reason[3]	Switched to another method[4]	Number of episodes of use[5]
IUD	1.6	4.0	0.9	8.1	0.4	0.0	2.9	17.8	2.3	304
Pill	(2.3)	(9.2)	(0.9)	(31.5)	(2.7)	(2.4)	(4.2)	(53.3)	(14.0)	252
Withdrawal	7.7	14.1	1.9	1.5	5.0	0.0	4.5	34.8	5.2	519
Other[6]	(4.0)	(9.8)	(2.1)	(11.4)	(1.8)	(3.5)	(8.2)	(41.0)	(10.8)	135
All methods	4.6	10.1	1.5	10.7	3.0	0.9	4.4	35.2	7.0	1,210

Note: Figures are based on life table calculations using information on episodes of use that occurred 3-62 months preceding the survey. Figures in parenthesis are based on 25-49 unweighted cases.
[1] Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation
[2] Includes lack of access/too far, costs too much, and inconvenient to use
[3] Reasons for discontinuation are mutually exclusive and add to the total given in this column
[4] A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within two months of discontinuation.
[5] All episodes of use that occur within the 5 years preceding the survey are included. Episodes of use include episodes that were discontinued during the period of observation and episodes of use that were not discontinued during the period of observation
[6] Includes female sterilization, injectables, male condom, diaphragm/foam/jelly, other modern methods and other traditional methods.

Table 7.10 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the 5 years preceding the survey by main reason stated for discontinuation, according to specific method, Turkey DHS 2018 - Syrian Sample

Reason	IUD	Pill	Male condom	Withdrawal	Other[1]	All methods
Became pregnant while using	5.1	10.0	(20.1)	25.2	(8.1)	15.4
Wanted to become pregnant	38.2	24.5	(32.1)	47.8	(20.3)	37.5
Husband/partner disapproved	1.1	1.7	(11.3)	1.7	(0.0)	2.0
Wanted a more effective method	0.5	3.4	(6.1)	9.2	(4.1)	5.2
Side effects/health concerns	36.1	35.6	(7.8)	1.6	(47.3)	20.9
Lack of access/too far	5.1	14.8	(2.6)	3.1	(12.2)	7.0
Cost too much	0.0	0.5	(5.2)	0.0	(0.0)	0.4
Inconvenient to use	1.6	1.0	(2.6)	0.0	(0.0)	0.8
Up to God/fatalistic	0.0	0.0	(0.0)	0.3	(0.0)	0.1
Difficult to get pregnant/menopausal	0.0	0.5	(0.0)	1.3	(0.0)	0.7
Infrequent sex/husband away	0.5	1.5	(5.3)	2.5	(0.0)	1.8
Marital dissolution/separation	2.7	1.5	(0.0)	0.4	(0.0)	1.3
Other	5.0	2.0	(3.5)	1.8	(4.1)	2.8
Don't know	0.0	0.0	(0.0)	0.0	(0.0)	0.0
Missing	3.9	2.9	(3.5)	5.0	(4.1)	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	192	207	40	314	26	779

Note: Figures in parenthesis are based on 25-49 unweighted cases. [1] Includes injectables, diaphragm/foam/jelly, emergency contraception, other modern methods and rhythm.

Table 7.11 Need and demand for family planning

Percentage of all women and currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
ALL WOMEN												
Age												
15-19	8.3	1.4	9.6	8.2	1.6	9.8	16.5	2.9	19.4	467	50.5	22.2
20-24	10.5	5.3	15.8	20.6	8.1	28.8	31.1	13.5	44.6	476	64.6	28.9
25-29	9.5	7.6	17.1	22.4	19.9	42.3	31.8	27.6	59.4	397	71.2	39.4
30-34	6.1	10.7	16.8	17.3	26.2	43.4	23.4	36.9	60.3	326	72.1	46.7
35-39	5.0	13.4	18.4	13.2	38.3	51.4	18.2	51.6	69.9	245	73.6	44.8
40-44	2.3	19.8	22.1	2.3	45.9	48.2	4.6	65.7	70.3	183	68.5	41.1
45-49	1.7	26.7	28.4	0.0	35.8	35.8	1.7	62.5	64.2	123	55.8	31.7
Residence												
Non-camp	7.6	8.9	16.5	14.5	19.3	33.8	22.1	28.3	50.3	2,126	67.1	37.9
Camp	3.5	9.4	13.0	12.2	23.9	36.1	15.7	33.4	49.1	90	73.6	34.4
Education												
No educ. / prim. incomp.	4.7	11.5	16.2	8.3	22.9	31.2	13.0	34.4	47.4	426	65.8	40.3
Complete primary	7.8	9.3	17.1	12.9	21.8	34.7	20.7	31.1	51.8	1,047	67.1	39.7
Complete secondary	8.4	6.1	14.6	19.2	15.5	34.8	27.7	21.7	49.3	433	70.5	35.9
Complete high school / higher	8.6	8.4	16.9	20.8	12.5	33.4	29.4	20.9	50.3	311	66.3	30.3
Total	7.4	9.0	16.4	14.4	19.5	33.9	21.8	28.5	50.3	2,216	67.4	37.8
CURRENTLY MARRIED WOMEN												
Age												
15-19	17.8	2.9	20.8	17.8	2.9	20.7	35.6	5.9	41.5	216	49.9	21.3
20-24	12.4	6.0	18.3	24.3	9.6	33.9	36.7	15.6	52.3	404	64.9	29.0
25-29	10.4	8.4	18.8	24.6	21.9	46.5	35.0	30.3	65.3	361	71.2	39.4
30-34	7.3	12.3	19.5	20.5	31.0	51.5	27.7	43.3	71.0	275	72.5	47.0
35-39	5.7	15.2	20.9	15.0	42.9	57.9	20.7	58.1	78.8	216	73.5	44.5
40-44	2.7	23.5	26.2	2.7	53.7	56.4	5.5	77.2	82.7	154	68.2	40.6
45-49	2.0	30.5	32.5	0.0	40.9	40.9	2.0	71.4	73.4	107	55.8	31.7
Residence												
Non-camp	9.7	11.3	21.0	18.4	24.4	42.9	28.1	35.7	63.9	1,667	67.2	37.8
Camp	4.7	12.6	17.3	16.2	31.9	48.2	20.9	44.5	65.4	67	73.6	34.4
Education												
No educ. / prim. incomp.	6.1	14.8	20.8	10.6	29.1	39.8	16.7	43.9	60.6	331	65.6	40.0
Complete primary	9.7	11.3	21.1	16.1	27.0	43.1	25.9	38.3	64.2	838	67.2	39.6
Complete secondary	11.2	8.1	19.3	25.5	20.6	46.0	36.6	28.7	65.3	327	70.5	35.9
Complete high school / higher	11.2	10.9	22.1	27.2	16.4	43.5	38.4	27.3	65.6	238	66.3	30.3
Total	9.5	11.3	20.8	18.4	24.7	43.1	27.9	36.1	63.9	1,734	67.4	37.7

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al.(2012).

[1] Total demand is the sum of unmet need and met need

[2] Percentage of demand satisfied is met need divided by total demand

[3] Modern methods include female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception and other modern methods

Table 7.12 Decision making about family planning

Among currently married women age 15-49 who are current users of family planning, percent distribution by who makes the decision to use family planning; among currently married women who are not currently using family planning, percent distribution by who makes the decision not to use family planning, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Among currently married women who are current users of family planning						Among currently married women who are not currently using family planning					
	Mainly wife	Mainly husband	Wife and husband jointly	Other/ don't know/ missing	Total	Number of women	Mainly wife	Mainly husband	Wife and husband jointly	Other/ don't know/ missing	Total	Number of women
Age												
15-19	(11.0)	(0.0)	(89.0)	(0.0)	(100.0)	19	6.2	8.2	84.5	1.0	100.0	102
20-24	6.9	2.3	90.8	0.0	100.0	61	11.8	2.6	84.3	1.3	100.0	166
25-29	12.9	1.2	85.5	0.4	100.0	93	11.9	1.8	86.3	0.0	100.0	121
30-34	11.0	2.6	86.4	0.0	100.0	83	11.5	0.0	85.5	2.9	100.0	85
35-39	9.7	3.1	85.7	1.5	100.0	69	21.3	2.1	74.1	2.6	100.0	69
40-44	24.2	2.3	73.5	0.0	100.0	45	13.0	1.9	82.6	2.5	100.0	57
45-49	(14.6)	(0.0)	(85.4)	(0.0)	(100.0)	14	19.2	3.7	75.3	1.8	100.0	57
Number of living children												
0	*	*	*	*	*	1	8.3	5.7	83.7	2.2	100.0	111
1-2	7.6	2.5	88.8	1.1	100.0	98	11.0	2.1	85.6	1.3	100.0	263
3-4	11.3	1.9	86.6	0.2	100.0	166	13.6	2.0	82.6	1.8	100.0	157
5+	16.7	1.8	81.5	0.0	100.0	120	19.0	3.4	76.8	0.8	100.0	126
Residence												
Non-camp	12.2	2.0	85.5	0.3	100.0	371	12.7	3.0	83.0	1.3	100.0	632
Camp	13.2	2.6	81.6	2.6	100.0	13	12.7	1.4	80.3	5.6	100.0	25
Education												
No educ. / prim. incomp.	11.3	8.2	80.6	0.0	100.0	65	10.4	4.1	84.0	1.5	100.0	139
Complete primary	12.8	0.7	86.5	0.0	100.0	198	15.2	2.3	81.0	1.4	100.0	321
Complete secondary	11.8	1.4	84.9	1.9	100.0	75	7.8	5.2	85.3	1.8	100.0	122
Complete high school / higher	12.1	0.0	87.9	0.0	100.0	46	13.9	0.0	84.7	1.4	100.0	76
Total	12.3	2.0	85.3	0.4	100.0	384	12.7	3.0	82.9	1.5	100.0	657

Note: Table excludes women who are currently pregnant. Figures in parenthesis are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.13 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Turkey DHS 2018 - Syrian Sample

	Number of living children[1]					
Intention to use in the future	0	1	2	3	4+	Total
Intends to use	10.9	32.3	46.5	53.7	41.4	39.1
Unsure	21.9	13.3	9.2	9.0	7.1	10.8
Does not intend to use	67.2	54.3	44.3	37.3	51.5	50.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	111	200	222	144	310	987

[1] Includes current pregnancy

Table 7.14 Preferred method of contraception for future use

Percent distribution of currently married women age 15-49 who are not using a contraceptive method but who intend to use in the future by preferred method, Turkey DHS 2018 - Syrian Sample

	Age of women		
Preferred future method	15-29	30-49	Percent distribution
Pill	16.2	18.2	16.7
IUD	49.5	48.6	49.3
Injections	0.9	1.4	1.0
Male condom	3.7	3.2	3.6
Female sterilization	1.1	7.3	2.7
Rhythm	0.4	1.0	0.5
Withdrawal	24.1	11.5	20.8
Other traditional	0.7	4.5	1.7
Implants/Norplant	0.4	1.0	0.5
Don't know	3.1	3.1	3.1
Total	100.0	100.0	100.0
Number of women	285	101	386

Table 7.15 Exposure to family planning messages

Percentage of all women age 15-49 who heard or saw a family planning message on radio, on television or in a newspaper in the past few months, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Radio	Television	Newspaper	Mobile phone	None of these four media sources	Number of women
Age						
15-19	0.3	3.4	0.3	0.0	96.4	467
20-24	0.9	4.8	0.4	0.7	94.5	476
25-29	2.0	3.4	0.8	0.3	95.7	397
30-34	1.6	5.1	1.3	0.6	93.3	326
35-39	1.4	7.4	1.8	0.4	90.9	245
40-44	1.3	5.8	2.3	0.6	91.9	183
45-49	1.7	6.1	0.9	0.0	93.9	123
Residence						
Non- camp	1.2	4.7	1.0	0.4	94.3	2,126
Camp	0.4	6.7	0.0	0.0	93.3	90
Education						
No educ. / prim. incomp.	0.5	3.3	0.2	0.0	96.4	426
Complete primary	1.0	4.2	0.3	0.1	95.2	1,047
Complete secondary	0.5	5.0	0.7	0.2	94.2	433
Complete high school / higher	3.9	8.2	4.2	2.0	88.3	311
Total	1.2	4.7	0.9	0.4	94.3	2,216

INFANT AND CHILD MORTALITY 8

Key Findings

- ***Current levels:*** Among Syrian migrants, he under-5 mortality rate was 27 deaths per 1,000 live births. This indicates 1 in 37 Syrian children do not survive to their 5th birthday. More than 80% of the deaths occur within the first month of life.
- ***Birth order:*** Under-5 mortality was 32 deaths per 1,000 live births for the first birth.
- ***High-risk fertility behaviour:*** The risk of mortality was highest for births in which the birth interval was less than 24 months and age of mother was less than 18.

Information on infant and child mortality is relevant to a demographic assessment of the population, and is an important indicator of socioeconomic development and quality of life. It can also help identify children who may be at higher risk of death and lead to strategies to reduce this risk, such as promoting birth spacing.

This chapter presents information on levels, trends, and differentials in perinatal, neonatal, infant, and under-5 mortality rates. It also examines biodemographic factors and fertility behaviors that increase mortality risks for infants and children. The information is collected as part of a retrospective birth history, in which female respondents list all of the children to whom they have given birth, along with each child's date of birth, survivorship status, and current age or age at death.

The quality of mortality estimates calculated from birth histories depends on the mother's ability to recall all of the children she has given birth to, as well as their birth dates and ages at death. Potential data quality problems include:

- The selective omission from the birth histories of those births that did not survive, which can result in underestimation of childhood mortality.
- The displacement of birth dates, which may distort mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year than the one in which it occurred. This may happen if an interviewer is trying to cut down on his or her overall work load, because live births occurring during the 5 years before the interview are the subject of a lengthy set of additional questions.
- The quality of reporting of age at death. Misreporting the child's age at death may distort the age pattern of mortality, especially if the net effect of the age misreporting is to transfer deaths from one age bracket to another.

- Any method of measuring childhood mortality that relies on the mothers' reports (e.g., birth histories) assumes that female adult mortality is not high, or if it is high, that there is little or no correlation between the mortality risks of the mothers and those of their children.
- The estimates are less robust for smaller numbers of deaths or for smaller samples.

Selected indicators of the quality of the mortality data on which the estimates of mortality in this chapter are based are presented in Appendix C, Tables C.3-C.6.

8.1 INFANT AND CHILD MORTALITY

Neonatal mortality: The probability of dying within the first month of life.

Postneonatal mortality: The probability of dying between the first month of life and the first birthday (computed as the difference between infant and neonatal mortality).

Infant mortality: The probability of dying between birth and the first birthday.

Child mortality: The probability of dying between the first and fifth birthday.

Under-5 mortality: The probability of dying between birth and the fifth birthday.

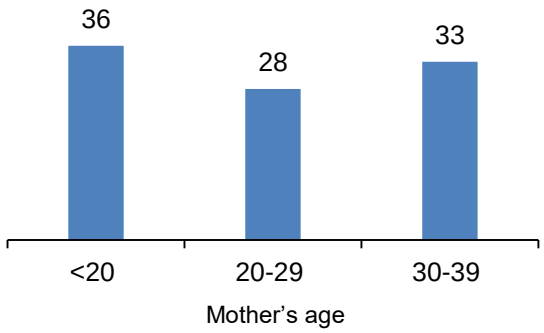
The 2018 TDHS Syrian Sample results showed that neonatal mortality was 12 deaths per 1,000 live births, infant mortality was 22 deaths per 1,000 births, and under-5 mortality was 27 deaths per 1,000 births in the 5-year period preceding the survey (June 2016 is the reference date of 5-year period) (**Table 8.1**). This indicates that approximately 1 in every 37 Syrian children in Turkey die before the fifth birthday. Most of the deaths (81%) occur in the first year of life, and 44% occur in the first month of life.

A number of socio-demographic characteristics of the child and mother affect mortality risks, including sex of child, mother's education, mother's age at birth, birth order, length of previous birth interval, and the size of the child at birth. The relationship between these characteristics and childhood mortality is shown in **Table 8.2.** Mortality estimates for all demographic variables in **Table 8.2**, except birth size, are calculated based on a ten-year period before the survey to reduce sampling variability.

Patterns by background characteristics

- Under-5 mortality is almost the same for male and female children (31 and 33, respectively). Infant mortality is also almost the same for male and female children (respectively 27 and 29 deaths per 1,000 births) (**Table 8.2**).
- Results indicate that the infant mortality and under-5 mortality rates are higher among children born to mothers less than age 20 and those age 30-39 (**Table 8.2** and **Figure 8.1**).
- Estimates from the 2018 TDHS Syrian sample show that the under-5 mortality rate is higher for the first birth (32). Child mortality seems to decrease with increasing length of the previous birth interval (**Table 8.2**).

***Figure 8.1* Under 5 mortality by mother's age**
Deaths per 1,000 live births for the 10-year period before the survey by age of Syrian mother



- The infant mortality decreases sharply from 38 per 1,000 live births for children born less than two years after a previous birth to 15 per 1,000 live births for children born two years after a previous birth (**Table 8.2**).

- Results show that under-5 mortality rate is highest - 42 per 1,000 live births - among children born less than two years after a previous birth (**Table 8.2**).

- Mothers who reported their children as "small or very small" at birth were more than twice as likely to die in the first year of life compared to children who were reported as "average or larger." (**Table 8.2**).

8.2 Biodemographic Risk Factors

Fertility behavior is known to have an influence on childhood mortality. Based on data from many countries, universally recognized risk factors include low (less than 18) or high (35 and above) maternal age, short birth intervals (less than 24 months), and births at high parities (four and above). These potential risk factors come from international studies and may or may not identify high risk in every country or sub-population. **Table 8.3** gives percent distribution of births in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey.

Twenty-one percent of births in the 5 years preceding the survey were not in any high-risk category. Twenty-two percent of births were in unavoidable risk category (first births to women between ages 18 and 34). More than half of births (57%) had at least one of the avoidable high-risk factors; 15% had two or more high-risk factors. The most common single high-risk categories are the birth interval less than 24 months (17%) and the birth order greater than three (15%).

The risk ratios presented in **Table 8.3** compare the risk of dying among births in each specific high-risk category to the proportion dead among births not in any high-risk category. In general, risk ratios are higher for children in multiple high-risk categories than in single high-risk categories (2.06 and 1.23 respectively). Among the single high-risk categories, the risk ratio is highest (1.97) for births that occur within 24 months of a previous birth. Of the multiple high-risk categories, the most vulnerable births are births of mothers younger than 18 and the birth interval less than 24 months. These children are more than 5 times as likely to die as children who were not in any high-risk category.

The last column of **Table 8.4** shows that 73% of currently married women belonged to an avoidable high-risk category. Of these, same proportion of women have the potential of having a birth in a single high-risk category and women in a multiple high-risk category (37%each).

8.3 Perinatal Mortality

Perinatal mortality rate

Perinatal deaths comprise stillbirths (pregnancy loss that occurs after 7 months of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). The perinatal mortality rate is calculated as the number of perinatal deaths per 1,000 pregnancies of 7 or more months' duration.

Sample: Number of pregnancies of 7 or more months' duration to women age 15-49 in the 5 years before the survey.

Table 8.4 presents number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the 5-year period preceding the survey, according to background characteristics for Syrian population in Turkey. The

number of stillbirths in 2018 TDHS Syrian sample was 13, and the number of early neonatal deaths was 12 in the 5-year period preceding the survey. These numbers imply a perinatal mortality rate of 13 deaths per 1,000 pregnancies of 7 or more months duration.

Patterns by background characteristics

- Perinatal mortality rate is highest for the first pregnancy (27 deaths per 1,000 pregnancies).
- Perinatal mortality rate is higher among children whose mothers were younger than 20 at the time of birth (17 deaths per 1,000 pregnancies).
- Perinatal mortality rate is higher among children whose mothers were living in the camps than non-camp areas (29 and 13 deaths per 1,000 pregnancies, respectively).

List of Tables

For more information on infant and child mortality, see the following tables:

- **Table 8.1 Early childhood mortality rates**
- **Table 8.2 Ten-year early childhood mortality rates according to socio-demographic characteristics**
- **Table 8.3 High-risk fertility behavior**
- **Table 8.4 Perinatal mortality**

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for 5-year periods preceding the survey, Turkey DHS 2018 - Syrian Sample

Years preceding the survey	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
0-4	12	10	22	5	27
5-9	22	13	35	2	37
10-14	25	17	42	10	52

[1] Computed as the difference between the infant and neonatal mortality rates

Table 8.2 Ten-year early childhood mortality rates according to socio-demographic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to socio-demographic characteristics of mother and child, Turkey DHS 2018 - Syrian Sample

Characteristic	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Mother's age at birth					
<20	15	13	29	7	36
20-29	16	9	25	3	28
30-39	18	10	28	5	33
Mother's education					
No educ. / prim. incomp.	13	16	29	5	33
Complete primary	16	13	29	5	34
Complete secondary	19	6	25	(0)	(25)
Complete high school / higher	(19)	(4)	(22)	(3)	(25)
Child's sex					
Male	16	11	27	4	31
Female	17	12	29	4	33
Birth order					
1	16	10	25	7	32
2-3	14	12	26	3	29
4-6	17	8	25	4	29
7+	(24)	(24)	(49)	*	*
Previous birth interval[2]					
<2 years	21	17	38	4	42
2 years	10	5	15	(5)	(20)
3 years	(16)	(11)	(27)	(0)	(27)
4+ years	(16)	(13)	(28)	(0)	(28)
Birth size[3]					
Small/very small	(21)	(17)	(38)	na	na
Average or larger	8	7	15	na	na

Note: Figures in parenthesis are based on 250-499 unweighted cases. An asterisk indicates that a figure is based on fewer than 250 unweighted cases and has been suppressed.
na = Not available
[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births
[3] Rates for the 5-year period before the survey

Table 8.3 High-risk fertility behavior

Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Turkey DHS 2018 - Syrian Sample

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high risk category	21.3	1.00	18.5
Unavoidable risk category			
First order births between ages 18 and 34 years	21.9	0.88	8.2
In any avoidable high-risk category	56.8	1.45	73.3
Single high-risk category			
Mother's age <18 only	9.0	1.82	1.6
Mother's age >34 only	0.6	*	3.0
Birth interval <24 months only	16.5	1.97	14.9
Birth order >3 only	15.3	0.07	17.2
Subtotal	41.4	1.23	36.7
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	1.7	(5.52)	0.9
Age >34 and birth interval <24 months	0.2	*	0.3
Age >34 and birth order >3	5.3	3.05	22.4
Age >34 and birth interval <24 months and birth order >3	1.1	*	2.3
Birth interval <24 months and birth order >3	7.0	0.87	10.8
Subtotal	15.3	2.06	36.6
Total	100.0	na	100.0
Subtotals by individual avoidable high-risk category			
Mother's age <18	10.6	2.40	2.5
Mother's age >34	7.3	*	27.9
Birth interval <24 months	26.6	1.80	29.1
Birth order >3	28.8	0.81	52.7
Number of births/women	1,903	na	1,734

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. Figures in parenthesis are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category age <18 and birth order >3

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the 5-year period preceding the survey, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months duration
Mother's age at birth				
<20	3	5	17	472
20-29	6	5	10	1,044
30-39	2	2	13	355
40-49	(2)	(0)	(61)	35
Previous pregnancy interval in months[4]				
First pregnancy	6	8	27	498
<15	4	1	10	576
15-26	0	1	3	371
27-38	0	2	11	195
39+	3	0	13	266
Residence				
Non- camp	13	11	13	1,821
Camp	1	2	29	84
Mother's education				
No educ./ prim. incomp.	2	0	8	331
Complete primary	5	6	12	941
Complete secondary	3	4	18	366
Complete high school / higher	3	2	20	267
Total	13	12	13	1,906

Note: Figures in parenthesis are based on 25-49 unweighted cases.
[1] Stillbirths are fetal deaths in pregnancies lasting 7 or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of 7 or more months' duration, expressed per 1,000.
[4] Category cutoffs correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months assuming a pregnancy duration of 9 months

MATERNAL HEALTH CARE 9

Key Findings

- ***Antenatal care coverage:*** The majority of Syrian women age 15-49 (93%) who had a live birth in the 5 years preceding the survey received antenatal care from a skilled provider for their most recent birth. 64% of women had four or more antenatal care visits.
- ***Components of antenatal care:*** The majority of pregnant Syrian women received the basic components of antenatal care (over 67% for most components). 82% of women took iron supplements during their pregnancy. 30% of women had tetanus vaccination during their pregnancy.
- ***Delivery:*** Almost all of births (98%) in the 5 years before the survey were delivered by a skilled provider, and 93% of births were delivered in a health facility.
- ***Caesarean section:*** 27% of all deliveries are delivered by caesarean section. 21% of births are delivered by caesarean section that was planned before the onset of labor pains.
- ***Postnatal checks:*** 86% of Syrian mothers and 69% of newborns had a postnatal check within the first 2 days after birth.

Health care services during pregnancy and childbirth and after delivery are important for the survival and wellbeing of both the mother and the infant. Antenatal care (ANC) can reduce health risks for mothers and their babies through monitoring of pregnancies and screening for complications. Delivery at a health facility, with skilled medical attention and hygienic conditions, reduces complications and infections during labor and delivery. Timely postnatal care treats complications arising from delivery and teaches the mother how to care for herself and her infant. Utilization of these services contributes to policies and programs to further improve maternal and child health care.

The first part of this chapter presents information on ANC providers, number and timing of ANC visits, and various components of care for Syrian migrant women in Turkey. The second part focuses on childbirth and includes information on place of delivery, assistance during delivery, and caesarean deliveries. The final section focuses on postnatal care and presents information on postnatal health checks for mothers and newborns.

9.1 ANTENATAL CARE COVERAGE AND CONTENT

9.1.1 Skilled Providers

Antenatal care (ANC) from a skilled provider

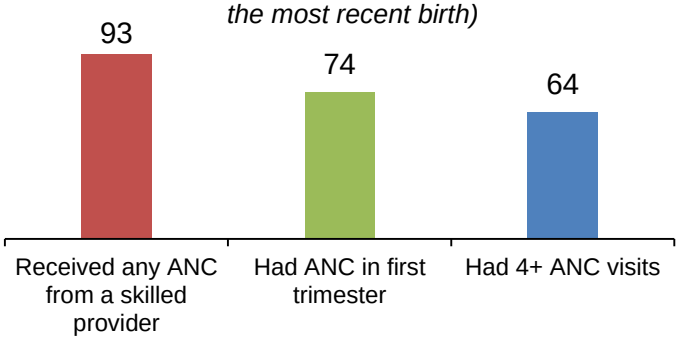
Pregnancy care received from skilled providers, such as doctors, nurses, and midwives.

Sample: Women age 15-49 who had a live birth in the 5 years before the survey

Antenatal care from a skilled provider is important in monitoring pregnancies to ensure that problems are identified early and managed before they develop into more serious complications. In Turkey, the majority of Syrian women (93%) received ANC from a skilled provider for their most recent birth in the 5 years preceding the survey (**Table 9.1** and **Figure 9.1**). This care was mostly provided by a doctor (89%). Only 4% of antenatal care was provided by a nurse or midwife.

***Figure 9.1* Antenatal care coverage**

Percentage of Syrian women age 15-49 who had a live birth in the 5 years before the survey by antenatal coverage (for the most recent birth)



9.1.2 Timing and Number of ANC Visits

Sixty-four percent of Syrian women in Turkey report having at least four antenatal care visits (**Table 9.2** and **Figure 9.1**). Only 7% of women did not received any ANC.

Seventy-four percent of Syrian women received ANC within their first trimester of pregnancy. Two percent of women delayed their first ANC visit until the eighth months or later.

Patterns by background characteristics

- Differences were small by type of residence with respect to number of ANC visit; 64% of non-camp women had four or more ANC visits, compared with 63% of women in camps.
- Similarly, the percentage of women receiving ANC in the first trimester did not vary substantially according to residence. Seventy-four percent of women in non-camp areas, 71% percent in camps received first ANC care in the first trimester.
- Considering the median months of pregnancy at first visit, Syrian women in camps and non-camps made the first ANC visit in the third month of their pregnancy (2.1 and 2.2 respectively).

9.2 COMPONENTS OF ANC VISITS

The effectiveness of antenatal checkups in ensuring safe motherhood depends in part on the tests and measurements done and the advice given during the checkups. The 2018 TDHS collected information on this important aspect of antenatal care by asking Syrian mothers who had antenatal checkups whether they received each of several components of ANC during their last pregnancy in the 5 years preceding the survey.

In Turkey, 82% of Syrian women age 15-49 with a live birth in the 5 years preceding the survey said that they

had taken iron supplements (tablets or syrup) during the pregnancy of their most recent birth (**Table 9.3**). Most Syrian women who received ANC for their most recent birth had key ANC services performed, including having their blood pressure measured (70%), a blood sample taken (71%) and an ultrasound performed (95%). The percentage of Syrian women who had had their urine sample taken was slightly lower than the other ANC services (67%).

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus, an important cause of death among infants. Thirty percent of the mothers received tetanus injections during their ANC visits for their most recent births in the 5 years before the survey.

Patterns by background characteristics

- The percentage of Syrian women who had their blood pressure measured, blood sample taken, and ultrasound performed increases with age. The percentage of women who had received iron supplements, and tetanus injection decreases with age.
- Considering the components of antenatal care, except for tetanus injection, there are no marked differences among camp and non-camp women. The coverage of tetanus injection was higher among camp women (61%) compared to non-camp women (29%).
- Educational differences are marked with respect to urine sample, blood pressure measured or blood sample being taken, and particularly iron supplement. The percentage of women who took iron tablets/syrup increases with education level, from 71% among those with no education or incomplete primary to 91% among those with high school or higher education. Likewise, with the percentage of women who had had their urine sample taken increases from 65% among those with no education to 73% among those with more than secondary education.

9.3 Delivery Services

9.3.1 Institutional Deliveries

Institutional deliveries
Deliveries that occur in a health facility.
Sample: All live births in the 5 years before the survey

Institutional deliveries are very common among Syrian migrant women in Turkey, with 93% of live births in the 5 years preceding the survey delivered in a health facility (**Table 9.4**). Seventy-six percent of deliveries occurred in public facilities and 18% in private facilities. Five percent of deliveries in the 5 years preceding the survey occurred at home.

Patterns by background characteristics

- The variation in this indicator by background variables is very small, in all categories at least 78% of births to Syrian women occurred in a health facility.
- Five percent of women who did not deliver in a health facility gave birth on their own.
- Private sector facilities were more common among Syrian mothers with high school or higher education (27%) compared to Syrian mothers with no education or incomplete primary education (14%).

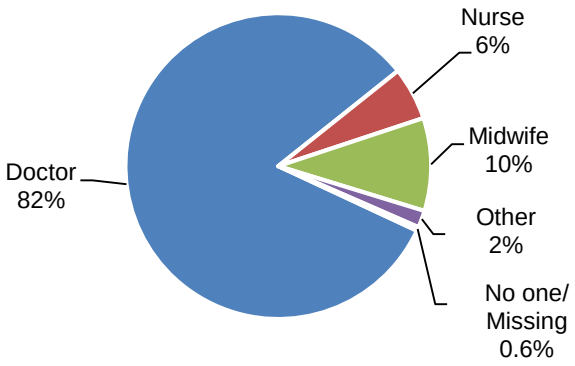
- The proportion of births occurring at a private sector facility is higher among Syrian mothers having their first birth (21%).
- Eighteen percent of the births to Syrian women residing in the non-camps were delivered in private sector facilities, compared to 5% of births to Syrian women living in camps.
- Seventeen percent of mothers who made no antenatal care visits gave birth at a health facility, compared with 3% of mothers with 4 or more antenatal care visits.

9.3.2 Skilled Assistance During Delivery

Skilled assistance during delivery
Births delivered with the assistance of doctors, nurse, and midwives.
Sample: All live births in the 5 years before the survey

Among Syrian migrants in Turkey, virtually all births in the 5 years preceding the survey were delivered by a skilled provider: 82% by a doctor and 16% by a nurse or midwife (**Table 9.5** and **Figure 9.2**).

***Figure 9.2* Assistance during delivery**
Percent distribution of births to Syrian women in the 5 years before the survey by assistance during delivery



Patterns by background characteristics

- Although variation in skilled assistance during delivery is relatively low, it was seen that Syrian women at parity 6 and above have lower levels of deliveries assisted by doctors (69%) and a higher level of deliveries assisted by midwives (17%).

9.3.3 Delivery by Caesarean

Access to caesarean sections (C-sections) can reduce maternal and neonatal mortality and complications such as obstetric fistula. However, use of caesarean sections without medical need can put women at risk of both short-term and long-term health problems. WHO advises that caesarean sections must be done when medically necessary but does not recommend a specific rate for countries to achieve at the population level. Research conducted by WHO has shown that increases in countries' caesarean section rates up to 10% are associated with declines in maternal and neonatal mortality. However, increases beyond 10% are not associated with reductions in maternal and newborn mortality rates (WHO, 2015).

In 2018 TDHS Syrian Sample, caesarean section rate for all births was 27% (**Table 9.6**). For 21% of births, the decision to deliver by C-section occurred before the onset of labor pains, while for 6% of births the decision was not made until after the onset of labor pains. The comparatively high ratio of planned to unplanned C-sections may indicate that a large proportion of C-section deliveries were not required or necessary.

Patterns by background characteristics

- The percentage of C-section among Syrian women age 35-49 was higher than those of Syrian women younger than 20 years old (35% and 21% respectively). Age is also related to planning status of the C-section delivery.

- C-sections were more common among deliveries in private facilities (45%) than those delivered in public facilities (25%). One in 3 births in private facilities were planned C-sections.
- The level of C-sections was highest among Syrian mothers with the highest education level (34%).
- C-section deliveries were reported least among Syrian mothers having their sixth or older births (21%).

Duration of Stay in Health Facility after Birth

Syrian women who gave birth in a health facility in the 5 years prior to the survey were asked how long they stayed in the facility following the birth. The duration of the stay was generally longer for C-section births than for vaginal births. Thirty-five percent of C-section births involved a stay of 3 or more days in a health facility, as compared to 7% of vaginal births (**Table 9.7**).

9.4 POSTNATAL CARE

The World Health Organization recommends that both mothers and newborns should receive a postnatal health check within 24 hours after delivery (WHO, 2017).

9.4.1 Postnatal Health Check for Mothers

Eighty-four percent of Syrian women who had a birth in the 2 years preceding the survey had a postnatal check within 24 hours of the delivery of their most recent birth, with 80% reporting that the first check occurred less than 4 hours after delivery (**Table 9.8**). Only 10% of women did not receive any postnatal check.

Patterns by background characteristics

- Eighty-seven percent of Syrian migrant women age 20-34 at the time of the birth received a postnatal check within 2 days of the delivery. The level of this indicator decreases to 83% for women under age 20.
- Syrian women in camps (90%) received postnatal care within 2 days after the last delivery at a higher level than women in non-camps areas (86%).
- The percentage of Syrian women who had a postnatal check during the first 2 days is lowest for women with primary education level (84%) and highest for women with complete secondary education level (91%).

Type of Provider

Sixty-six percent of Syrian women giving birth in the 2 years before the survey received postnatal care from a doctor for their most recent birth, while 20% received care from a nurse or midwife (**Table 9.9**).

9.4.2 Postnatal Health Check for Newborns

Sixty-nine percent had a postnatal check in the first 2 days after birth (**Table 9.10**). Sixty-six percent of newborns had a check within 24 hours after delivery, with sixty-two percent were being checked within 4 hours after delivery.

Patterns by background characteristics

- The percentage of births with a postnatal check during the first 2 days after birth was slightly higher for Syrian women living in camps (77%) than for women living outside camp areas (69%).

- The percentage of newborns receiving postnatal care within 2 days after the birth varied within a range of 52% for women with less than primary education to 72% for women with high school or higher education.

Type of Provider

Sixty-four percent of newborns in the 2 years preceding the survey had a postnatal check from a doctor, while the proportion of a nurse or midwife is 5% for newborns' postnatal checkups (**Table 9.11**).

LIST OF TABLES

For more information on maternal health care, see the following tables:

- **Table 9.1 Antenatal care**
- **Table 9.2 Number of antenatal care visits and timing of first visit**
- **Table 9.3 Components of antenatal care**
- **Table 9.4 Place of delivery**
- **Table 9.5 Assistance during delivery**
- **Table 9.6 Caesarean section**
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- **Table 9.8 Timing of first postnatal check for the mother**
- **Table 9.9 Type of provider of first postnatal check for the mother**
- **Table 9.10 Timing of first postnatal check for the new-born**
- **Table 9.11 Type of provider of first postnatal check for the new-born**

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Antenatal care provider					Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
	Doctor	Nurse	Midwife	Missing	No ANC			
Age at birth								
<20	87.7	0.0	6.1	0.0	6.1	100.0	93.9	242
20-34	90.1	0.3	2.6	0.4	6.6	100.0	93.0	838
35-49	87.7	0.0	2.8	0.0	9.5	100.0	90.5	115
Birth order								
1	90.1	0.0	4.8	0.0	5.1	100.0	94.9	272
2-3	90.0	0.2	3.1	0.2	6.5	100.0	93.3	512
4-5	88.8	0.0	2.9	0.0	8.3	100.0	91.7	254
6+	87.1	0.9	2.0	1.4	8.6	100.0	90.1	155
Residence								
Non- camp	89.4	0.2	3.4	0.3	6.7	100.0	93.0	1,146
Camp	89.9	0.7	0.7	0.0	8.6	100.0	91.4	49
Education								
No educ. / prim. incomp.	84.8	0.0	1.5	1.0	12.7	100.0	86.3	210
Complete primary	89.6	0.2	4.2	0.2	5.8	100.0	94.0	585
Complete secondary	91.3	0.5	4.0	0.0	4.3	100.0	95.7	223
Complete high school/ higher	91.8	0.0	1.8	0.0	6.4	100.0	93.6	176
Total	89.4	0.2	3.3	0.3	6.8	100.0	92.9	1,194

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
[1] Skilled provider includes doctor, nurse and midwife.

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Turkey DHS 2018 - Syrian Sample

	Residence		
Number of ANC visits and timing of first visit	Non-camp	Camp	Total
Number of ANC visits			
None	7.0	8.6	7.1
1	6.6	8.6	6.7
2-3	22.2	20.1	22.1
4+	63.8	62.6	63.7
Don't know/missing	0.4	0.0	0.4
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	7.0	8.6	7.1
<4	74.0	71.2	73.9
4-5	12.0	12.2	12.0
6-7	4.7	5.0	4.7
8+	2.0	2.9	2.1
Don't know/missing	0.3	0.0	0.3
Total	100.0	100.0	100.0
Number of women	1,146	49	1,194
Median months pregnant at first visit (for those with ANC)	2.2	2.1	2.2
Number of women with ANC	1,065	45	1,110

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the 5 years preceding the survey, percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent live birth; and among women receiving antenatal care (ANC) for the most recent live birth in the 5 years preceding the survey, percentage receiving specific antenatal services, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Among women with a live birth in the past 5 years, percentage who during the pregnancy of their most recent live birth:		Among women who received antenatal care for their most recent birth in the past 5 years, percentage with selected services					
	Took iron tablets or syrup	Number of women with a live birth in the past 5 years	Blood pressure measured	Urine sample taken	Blood sample taken	Ultrasound	Tetanus injection	Number of women with ANC for their most recent birth
Age at birth								
<20	80.9	242	67.1	67.1	68.8	93.5	27.4	227
20-34	83.6	838	70.4	67.0	71.9	95.3	30.7	779
35-49	74.8	115	71.5	68.5	72.9	96.6	30.5	104
Birth order								
1	86.0	272	68.7	71.7	75.6	95.1	27.7	259
2-3	81.5	512	69.6	65.3	69.7	95.3	25.7	478
4-5	82.1	254	72.7	68.2	72.9	93.8	35.4	233
6+	78.3	155	68.1	63.3	66.6	96.0	40.2	140
Residence								
Non- camp	82.4	1,146	69.7	67.0	71.2	94.9	28.7	1,065
Camp	79.1	49	74.0	70.1	75.6	96.9	60.6	45
Education								
No educ. / prim. incomp.	70.9	210	64.7	64.8	67.9	92.1	25.7	182
Complete primary	81.4	585	68.3	64.9	68.0	94.1	29.8	550
Complete secondary	88.6	223	73.0	70.3	74.8	98.5	31.3	213
Complete high school/ higher	90.6	176	76.7	72.9	81.8	96.8	33.7	165
Total	82.2	1,194	69.8	67.1	71.3	95.0	30.0	1,110

Table 9.4 Place of delivery

Percent distribution of live births in the 5 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Health facility		Home	Other	Missing	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector						
Mother's age at birth								
<20	77.3	17.5	3.6	1.6	0.0	100.0	94.8	469
20-34	75.1	18.0	5.3	1.3	0.3	100.0	93.1	1,295
35-49	74.0	16.7	7.1	2.3	0.0	100.0	90.6	139
Birth order								
1	75.9	20.5	2.3	1.1	0.2	100.0	96.4	581
2-3	76.9	17.7	4.6	0.8	0.1	100.0	94.5	774
4-5	76.0	15.1	6.1	2.8	0.0	100.0	91.1	343
6+	69.3	14.8	12.4	2.6	1.0	100.0	84.0	205
Antenatal care visits[1]								
None	68.7	9.1	16.7	1.7	3.7	100.0	77.9	85
1-3	82.1	12.6	3.5	1.8	0.0	100.0	94.7	345
4+	75.1	21.3	2.6	1.0	0.0	100.0	96.4	761
Don't know/missing	*	*	*	*	*	*	*	4
Residence								
Non- camp	75.0	18.3	5.0	1.5	0.2	100.0	93.3	1,819
Camp	88.7	5.4	5.0	0.8	0.0	100.0	94.1	84
Mother's education								
No educ. / prim. incomp.	76.0	13.7	6.7	2.7	1.0	100.0	89.7	331
Complete primary	78.4	15.5	4.4	1.5	0.1	100.0	94.0	939
Complete secondary	73.6	20.4	5.4	0.6	0.0	100.0	94.0	365
Complete high school / higher	67.8	27.1	4.3	0.8	0.0	100.0	94.9	268
Total	75.6	17.8	5.0	1.4	0.2	100.0	93.4	1,903

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes only the most recent birth in the five years preceding the survey

Table 9.5 Assistance during delivery

Percent distribution of live births in the 5 years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage with skin-to-skin contact immediately after birth, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Person providing assistance during delivery								Percentage delivered by a skilled provider[1]	Number of births
	Doctor	Nurse	Midwife	Traditional birth attendant	Relative/ other	No one	Don't know/ missing	Total		
Mother's age at birth										
<20	86.1	5.1	8.4	0.0	0.2	0.2	0.0	100.0	99.6	469
20-34	81.0	5.9	10.0	0.7	1.7	0.5	0.3	100.0	96.9	1,295
35-49	79.5	4.1	12.6	0.0	3.0	0.8	0.0	100.0	96.2	139
Birth order										
1	86.0	5.4	7.8	0.0	0.4	0.2	0.2	100.0	99.3	581
2-3	84.7	4.4	8.5	0.5	1.3	0.5	0.1	100.0	97.5	774
4-5	77.7	7.9	11.5	0.9	1.7	0.3	0.0	100.0	97.0	343
6+	69.1	6.7	17.2	0.5	4.1	1.4	1.0	100.0	93.0	205
Antenatal care visits[2]										
None	69.2	2.5	17.9	1.2	3.8	1.7	3.7	100.0	89.6	85
1-3	81.0	6.4	10.1	0.3	1.7	0.4	0.0	100.0	97.5	345
4+	85.6	7.4	5.2	0.1	1.2	0.5	0.0	100.0	98.2	761
Don't know/missing	*	*	*	*	*	*	*	*	*	4
Place of delivery										
Health facility	87.4	5.8	6.4	0.1	0.3	0.1	0.0	100.0	99.5	1,777
Public facility	87.3	6.9	5.2	0.1	0.4	0.1	0.0	100.0	99.4	1,439
Private facility	87.8	0.9	11.2	0.0	0.0	0.0	0.0	100.0	100.0	338
Elsewhere	8.9	2.6	59.7	6.0	17.6	5.2	0.0	100.0	71.2	122
Missing	*	*	*	*	*	*	*	*	*	4
Residence										
Non- camp	82.1	5.5	10.0	0.5	1.4	0.4	0.2	100.0	97.5	1,819
Camp	83.3	8.4	5.4	0.0	1.7	1.3	0.0	100.0	97.1	84
Mother's education										
No educ. / prim. incomp.	79.6	4.0	10.7	1.0	3.1	0.6	1.0	100.0	94.4	331
Complete primary	82.4	5.8	9.9	0.1	1.4	0.3	0.1	100.0	98.1	939
Complete secondary	83.8	6.5	8.0	0.9	0.8	0.1	0.0	100.0	98.3	365
Complete high school / higher	81.9	5.5	10.6	0.4	0.4	1.2	0.0	100.0	98.0	268
Total	82.1	5.6	9.8	0.4	1.4	0.4	0.2	100.0	97.5	1,903

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Skilled provider doctor nurse and midwife

[2] Includes only the most recent birth in the five years preceding the survey

Table 9.6 Caesarean section

Percentage of live births in the 5 years preceding the survey delivered by Caesarean section (C-section), percentage delivered by C-section that was planned before the onset of labor pains, and percentage delivered by C-section that was decided after the onset of labor pains, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Percentage delivered by C-section	Timing of decision to conduct C-section: Planned before onset of labor pains	Timing of decision to conduct C-section: Decided after onset of labor pains	Timing of decision to conduct C-section: Missing	Number of births
Mother's age at birth					
<20	20.7	14.1	6.6	0.0	469
20-34	28.3	22.4	6.0	0.3	1,295
35-49	35.4	29.8	5.6	0.0	139
Birth order					
1	25.9	14.9	11.0	0.2	581
2-3	28.3	24.4	4.0	0.1	774
4-5	29.3	24.4	4.9	0.0	343
6+	21.1	18.9	2.2	1.0	205
Antenatal care visits[1]					
None	22.9	19.2	3.8	3.7	85
1-3	21.4	16.9	4.5	0.0	345
4+	33.5	24.8	8.6	0.0	761
Don't know/missing	*	*	*	*	4
Place of delivery					
Health facility	28.8	22.4	6.5	0.0	1,777
Public facility	25.1	20.0	5.2	0.0	1,439
Private facility	44.6	32.5	12.1	0.0	338
Residence					
Non- camp	26.9	20.8	6.2	0.2	1,819
Camp	28.0	23.4	4.6	0.0	84
Mother's education					
No educ. / prim. incomp.	25.8	21.7	4.2	1.0	331
Complete primary	25.9	20.7	5.2	0.1	939
Complete secondary	25.4	17.3	8.2	0.0	365
Complete high school / higher	34.4	25.4	9.0	0.0	268
Total	27.0	20.9	6.1	0.2	1,903

Note: The question on C-section is asked only of women who delivered in a health facility. In this table, it is assumed that women who did not give birth in health facility did not receive a c-section. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes only the most recent birth in the 5 years preceding the survey

Table 9.7 Duration of stay in health facility after birth

Among women with a birth in the 5 years preceding the survey who delivered their most recent live birth in a health facility, percent distribution by duration of stay in the health facility following their most recent live birth, according to type of delivery, Turkey DHS 2018 - Syrian Sample

Type of delivery	< 6 hours	6-11 hours	12-23 hours	1-2 days	3+ days	Missing	Total	Number of women
Vaginal birth	15.2	2.8	2.1	72.7	7.2	0.0	100.0	782
Caesarean section	9.2	0.3	0.9	54.3	35.0	0.3	100.0	347

Table 9.8 Timing of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution of the mother's first postnatal check for the most recent live birth by time after delivery, and percentage of women with a live birth during the 2 years preceding the survey who received a postnatal check in the first 2 days and first 41 days after giving birth, according to background characteristics, Turkey DHS 2018

	Time after delivery of mother's first postnatal check[1]								Percentage of women with a postnatal check during:		
Background characteristic	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing	No postnatal check[2]	Total	First 2 days after birth	41 days after birth	Number of women
Age at birth											
<20	75.6	4.7	2.8	1.1	3.0	0.0	12.8	100.0	83.1	87.2	189
20-34	80.6	4.1	2.7	0.4	1.9	0.2	10.1	100.0	87.4	89.7	523
35-49	83.2	0.0	3.1	2.3	6.9	0.0	4.5	100.0	86.3	95.5	46
Birth order											
1	76.2	6.2	3.4	1.1	3.4	0.0	9.8	100.0	85.8	90.2	198
2-3	81.4	3.2	1.8	0.3	1.9	0.3	11.1	100.0	86.5	88.6	359
4-5	80.8	3.9	3.4	0.8	1.6	0.0	9.6	100.0	88.0	90.4	135
6+	76.8	1.6	4.8	1.6	4.8	0.0	10.5	100.0	83.1	89.5	67
Residence											
Non-camp	79.3	4.1	2.8	0.7	2.5	0.1	10.5	100.0	86.1	89.3	730
Camp	85.5	2.4	2.4	0.0	2.4	0.0	7.2	100.0	90.4	92.8	29
Education											
No educ. / prim. incomp.	80.6	1.8	2.7	0.9	2.8	0.0	11.2	100.0	85.1	88.8	116
Complete primary	77.1	4.8	2.2	0.8	2.7	0.0	12.4	100.0	84.1	87.6	381
Complete secondary	81.8	3.8	5.0	0.7	2.8	0.0	5.9	100.0	90.5	94.1	149
Comp.high school / higher	83.8	3.7	1.6	0.0	0.9	0.9	9.0	100.0	89.1	90.0	113
Total	79.5	4.0	2.7	0.7	2.5	0.1	10.4	100.0	86.3	89.4	759

[1] Includes women who received a check from a doctor, nurse and midwife
[2] Includes women who received a check after 41 days

Table 9.9 Type of provider of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution by type of provider of the mother's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Type of health provider of mother's first postnatal check		No postnatal check during the first 2 days after birth	Total	Number of women
	Doctor	Nurse/ midwife			
Age at birth					
<20	64.3	18.8	16.9	100.0	189
20-34	66.9	20.6	12.6	100.0	523
35-49	60.7	25.7	13.7	100.0	46
Birth order					
1	66.0	19.8	14.2	100.0	198
2-3	67.8	18.7	13.5	100.0	359
4-5	62.8	25.3	12.0	100.0	135
6+	61.1	22.1	16.9	100.0	67
Residence					
Non- camp	65.9	20.3	13.9	100.0	730
Camp	65.1	25.3	9.6	100.0	29
Education					
No educ. / prim. incomp.	64.8	20.3	14.9	100.0	116
Complete primary	64.4	19.8	15.9	100.0	381
Complete secondary	63.3	27.2	9.5	100.0	149
Complete high school / higher	75.1	14.0	10.9	100.0	113
Total	65.8	20.4	13.7	100.0	759

Table 9.10 Timing of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by time after birth of first postnatal check, and percentage of births with a postnatal check during the first 2 days after birth, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Time after delivery of newborn's first postnatal check[1]								Percentage of births with a postnatal check during the first 2 days after birth[1]	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know	No postnatal check[2]	Total		
Mother's age at birth										
<20	41.0	18.8	4.7	5.0	3.3	0.0	27.2	100.0	69.4	189
20-34	39.3	22.6	4.0	3.1	2.5	0.4	28.2	100.0	68.9	523
35-49	38.6	29.6	2.3	0.8	0.0	2.3	26.5	100.0	71.2	46
Birth order										
1	39.3	21.0	5.5	4.8	4.3	1.6	23.5	100.0	70.6	198
2-3	40.6	21.2	3.4	2.7	2.5	0.0	29.6	100.0	67.9	359
4-5	40.1	24.7	3.9	4.4	0.8	0.0	26.0	100.0	73.2	135
6+	35.3	24.3	3.2	1.1	1.6	0.0	34.7	100.0	63.7	67
Residence										
Non- camp	39.5	22.0	4.1	3.3	2.6	0.4	28.1	100.0	68.9	730
Camp	44.6	22.9	3.6	6.0	1.2	0.0	21.7	100.0	77.1	29
Mother's education										
No educ. / prim. incomp.	29.3	20.9	0.0	1.5	0.9	0.0	47.3	100.0	51.7	116
Complete primary	42.9	21.0	5.2	3.3	2.2	0.0	25.4	100.0	72.4	381
Complete secondary	39.0	23.5	5.7	4.3	4.3	0.7	22.5	100.0	72.5	149
Complete high school / higher	40.2	24.9	2.2	4.7	3.1	1.9	23.0	100.0	71.9	113
Total	39.7	22.0	4.0	3.4	2.6	0.4	27.8	100.0	69.2	759

[1] Includes newborns who received a check from a doctor, midwife and nurse
[2] Includes newborns who received a check after the first week of life

Table 9.11 Type of provider of first postnatal check for the newborn

Percent distribution of most recent live birth in the 2 years preceding the survey by type of provider of the newborn's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Type of health provider of newborn's first postnatal check		No postnatal check during the first 2 days after birth	Total	Number of births
	Doctor	Nurse/ midwife			
Mother's age at birth					
<20	65.0	4.5	30.6	100.0	189
20-34	63.3	5.6	31.1	100.0	523
35-49	64.4	6.8	28.8	100.0	46
Birth order					
1	66.9	3.7	29.4	100.0	198
2-3	61.8	6.1	32.1	100.0	359
4-5	67.7	5.5	26.8	100.0	135
6+	57.4	6.3	36.3	100.0	67
Residence					
Non- camp	63.4	5.5	31.1	100.0	730
Camp	74.7	2.4	22.9	100.0	29
Mother's education					
No educ. / prim. incomp.	47.2	4.5	48.3	100.0	116
Complete primary	66.9	5.5	27.6	100.0	381
Complete secondary	68.2	4.3	27.5	100.0	149
Complete high school / higher	64.8	7.2	28.1	100.0	113
Total	63.8	5.4	30.8	100.0	759

CHILD HEALTH 10

Key Findings

- ***Low birth weight:*** 20% of live births in the 5 years preceding the survey that have a reported birth weight had a low birth weight among the Syrian population.
- ***All basic vaccinations:*** 64% of Syrian children age 24-35 months had received all basic vaccinations by the time of the survey.

Information on child health and survival can help policymakers and programme managers assess the efficacy of current strategies, formulate appropriate interventions to prevent deaths from childhood illnesses, and improve the health of children in Turkey. This chapter presents information on birth weight and vaccination status for young children among Syrian refugee population in Turkey.

10.1 BIRTH WEIGHT

Low birth weight

Percentage of births with a reported birth weight below 2.5 kilograms regardless of gestational age.

Sample: Live births in the 5 years before the survey that have a reported birth weight, from either a written record or the mother's report

Information on low birth weight is very important since it can not only be an indicator of maternal nutrition but also a predictive indicator of potential neonatal death and of malnutrition if the child survives. Children with low birth weight have been shown to have a higher than average risk of dying during early childhood.

For all births in the five years preceding the survey, the birth weight was recorded in the 2018 TDHS questionnaire from either a written record if available or the mother's recall. Data on the child's weight at birth were available for 81% of births of the Syrian sample during the five-year period prior to the 2018 TDHS (**Table 10.1**). Availability of birth weight information was less than average for Syrian refugee births of order four and higher, births in the residence of camps, births to mothers of age more than 35, and in the lower education categories than for other Syrian refugee births. Among births to Syrian population with a reported weight, 20% had a low birth weight (less than 2.5 kg.).

In 2018 TDHS, the mother's perception of the baby's size at birth was also obtained. Although these estimates are subjective; they can be a useful proxy for weight at birth. Eight percent of all babies were reported to be "very small" and 15% were reported to be "smaller than average" by their mothers (**Table 10.1**).

Patterns by background characteristics

- Low birth weight of children was slightly more common among young Syrian mothers (under age 20 at birth) (21%). The proportions of babies reported as "very small" or "smaller than average"

were slightly lower among those born to Syrian mothers under age 20 (21%; where average is 23%).

- Among the Syrian refugee population, distributions of low birth weight and small size by birth order were different from each other. Low birth weight was more common among births of order 4-5 and less common among births of order 6 and over, than other parity births (23% and 15%, respectively). Small size based on mother's estimate on the other hand, was more common among first births (24%) and births of order 4 and over (over 24%).

- Syrian women with more education had lower proportions of babies weighing less than 2.5 kilograms at birth. Among children born to Syrian women with no or primary incomplete education, 26% had low birth weight while this proportion was 15% among the ones born to mothers with completed high school or higher education.

10.2 VACCINATION OF CHILDREN

All basic vaccinations coverage

Percentage of children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all basic vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of DTaP-IPV-Hib vaccine, which protects against diphtheria, pertussis (whooping cough), tetanus, polio and haemophilus influenzae type b
- One dose of MMR vaccine, which protects against measles, mumps and rubella

Sample: Living children age 24-35 months

All age appropriate vaccinations coverage for 12-23 months

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all 12-23 months of age appropriate vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of DTaP-IPV-Hib vaccine, which protects against diphtheria, pertussis (whooping cough), tetanus, polio and haemophilus influenzae type b
- Three doses of Hepatitis B vaccine
- Three doses of pneumococcal conjugate vaccine (PCV)
- One dose of oral polio (OPV) vaccine

Sample: Living children age 12-23 months

All age appropriate vaccinations coverage for 24-35 months

Percentage of children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all 24-35 months of age appropriate vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of DTaP-IPV-Hib vaccine, which protects against diphtheria, pertussis (whooping cough), tetanus, polio and haemophilus influenzae type b
- One dose of MMR vaccine, which protects against measles, mumps and rubella
- Three doses of Hepatitis B vaccine
- Three doses of pneumococcal conjugate vaccine (PCV)
- Two doses of oral polio (OPV) vaccine
- Two doses of Hepatitis A vaccine
- One dose of varicella (chickenpox) vaccine

Sample: Living children age 24-35 months

Syrian migrant children face a major risk of exposure to infectious diseases as they have been involved in large migration movements. The vaccines are provided by the Turkish government free of charge to Syrian refugees. All new immunization records are also transferred into Turkey's health information system.

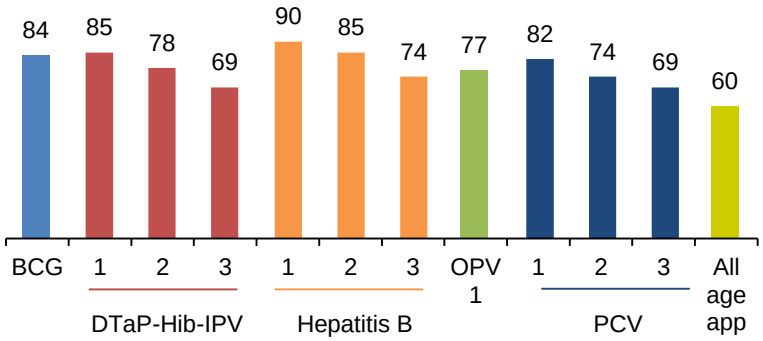
In the 2018 TDHS, information was collected on immunization of all children born in or after January 2015. To obtain data for each eligible child, mothers were asked whether they had a vaccination card for the child, and if so, to show the card to the interviewer. The dates of the vaccinations were copied from the card to the questionnaire. Mothers were also asked whether the child has been given any vaccination not recorded on the card. If a vaccination card was not available for the child, the mother was asked a number of questions in order to determine the vaccination status of the child for each specific vaccine. If the mother reported her child receiving a vaccine that requires multiple doses, she was asked to report the number of doses of the vaccine that the child had received.

Taking into account both information from vaccination card and the mothers' reports, 60% of all Syrian refugee children age 12-23 months received all age appropriate vaccinations during the first 23 months of life (**Table 10.2**). The total of 60% decomposes into information sources as: 59% by children for whom a vaccination card was seen and 1% based on mother's reporting. Mothers' reports being the source of information instead of vaccination card was more common for children age 24-35 than 12-23 (24% by card and 4% by mother's report). In total, 28% of Syrian refugee children age 24-35 received all age appropriate vaccinations. Eight percent of Syrian children between ages 12-23 months and 8% of Syrian children age 24-35 months had not received any vaccinations at all. The level of Syrian children age 24-35 who received all basic vaccinations is 64%.

Figure 10.1 shows coverage of all age appropriate vaccinations among Syrian refugee children age 12-23 months. Regarding specific vaccinations, 84% of children received the BCG vaccine. Seventy-seven percent received the first dose of oral polio. The coverage rate for the first dose of DTaP-IPV-Hib was relatively high (85%), but declined steadily after the first dose (78% and 69% respectively for the 2nd and 3rd doses). The same pattern was observed for doses of other vaccines with repeated doses (Hepatitis B and PCV vaccines).

***Figure 10.1* Childhood vaccinations**

Percentage of Syrian children age 12-23 months vaccinated at any time before the survey



Patterns by background characteristics

- The proportion of Syrian girls receiving all age appropriate vaccinations at age 12-23 months is higher than Syrian boys (64% girls vs. 58% boys) (**Table 10.3**).
- The proportion of receiving all age appropriate vaccinations for Syrian refugee children age 12-23 months declines with increasing birth order (64% for first birth, 62% for 2nd or 3rd birth, and 50% for 4th or 5th birth). This pattern was also observed for the 24-35 months age group.
- The widest gap for receiving all age appropriate or basic vaccinations is between Syrian refugee children for whom a vaccination card was seen vs. those whose cards have not been seen or who did not have them. Only 7% of those whose cards were not seen or did not exist received all age appropriate vaccinations for age 12-23 months, as opposed to 73% for those with cards seen.
- Among Syrian mothers' educational levels, there is an increase in all age appropriate vaccinations for age 12-23 months with increasing education (50% for less than primary school vs. 67% for secondary school graduates). A similar pattern applied for children age 24-35 months as well.

Vaccination Card Ownership and Availability

A vaccination card is a critical tool in ensuring that a child receives all necessary vaccinations within the determined time. Ninety percent of Syrian refugee children age 12-23 months ever had a vaccination card, while 86% of Syrian refugee children of age 24-35 months ever owned a vaccination card (**Table 10.4**).

Patterns by background characteristics

- The proportion of children age 12-23 months whose vaccination cards were shown by their Syrian mothers to the interviewers was higher than those age 24-35 months (81% and 75%, respectively).
- Prevalence of possession and observation of vaccination card increases by educational level of the mother among Syrian refugee children age 12-23 months (89% ever had a vaccination card among children whose mothers had less than primary school education vs. 96% for secondary school graduates).

LIST OF TABLES

For more information on low birth weight, and vaccinations, see the following tables:

- **Table 10.1 Child's size and weight at birth**
- **Table 10.2 Vaccinations by source of information**
- **Table 10.3 Vaccinations by background characteristics**
- **Table 10.4 Possession and observation of vaccination cards**

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the 5 years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the 5 years preceding the survey that have a reported birth weight, and among live births in the 5 years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Percent distribution of births by size of baby at birth					Percentage of births that have a reported birth weight[1]	Number of births	Among births with a reported birth weight[1]	
	Very small	Smaller than average	Average or larger	Don't know/ missing	Total			Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	8.2	13.2	75.5	3.1	100.0	84.2	469	21.2	395
20-34	7.6	15.6	74.0	2.9	100.0	80.5	1,295	19.7	1,042
35-49	12.1	10.6	74.7	2.6	100.0	76.4	139	18.5	106
Birth order									
1	8.8	15.0	73.6	2.6	100.0	85.2	581	21.0	495
2-3	7.4	13.2	76.5	2.9	100.0	81.8	774	19.1	633
4-5	7.8	16.4	72.2	3.6	100.0	76.9	343	22.8	264
6+	8.9	16.1	72.5	2.4	100.0	73.9	205	15.1	151
Residence									
Non- camp	7.9	14.7	74.6	2.8	100.0	81.3	1,819	19.9	1,478
Camp	10.5	14.2	70.3	5.0	100.0	77.8	84	21.0	65
Mother's education									
No educ / prim. incomp.	9.2	17.0	66.5	7.3	100.0	71.2	331	26.3	235
Complete primary	7.1	15.7	74.8	2.4	100.0	80.4	939	20.6	755
Complete secondary	9.2	13.6	75.0	2.2	100.0	84.2	365	17.9	307
Complete high school / higher	8.5	9.6	81.9	0.0	100.0	91.7	268	14.6	246
Total	8.1	14.7	74.4	2.9	100.0	81.1	1,903	20.0	1,544

[1] Based on either a written record or the mother's recall

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage who received specific vaccines by the appropriate age, Turkey DHS 2018 - Syrian Sample

	Children age 12-23 months				Children age 24-35 months			
Vaccine	Vaccination card[1]	Mother's report	Either source	Vaccinated by appropriate age[2,3]	Vaccination card[1]	Mother's report	Either source	Vaccinated by appropriate age[3,4]
BCG	74.3	9.2	83.5	76.5	66.8	16.3	83.1	69.1
DTaPHibIPV								
1	78.2	6.4	84.7	80.4	73.4	12.3	85.8	70.2
2	74.1	4.2	78.3	73.0	68.2	7.8	76.1	61.8
3	67.0	1.8	68.7	58.7	62.3	6.2	68.5	51.0
OPV								
1	71.5	5.4	76.9	68.1	66.4	12.6	79.0	58.2
2	na	na	na	na	47.6	8.1	55.7	49.5
HepB								
1	81.0	8.9	89.9	87.0	72.9	15.7	88.6	78.2
2	77.5	7.5	85.0	79.4	69.5	10.7	80.2	70.7
3	68.4	5.6	74.0	63.1	62.3	9.8	72.0	59.8
PCV								
1	75.0	7.1	82.1	76.0	67.6	14.6	82.2	67.3
2	69.2	5.0	74.2	68.8	61.7	8.2	69.9	57.0
3	65.5	3.1	68.7	57.6	56.0	7.1	63.1	47.6
MMR	na	na	na	na	67.9	14.6	82.5	74.5
HepA								
1	na	na	na	na	52.0	12.9	64.9	58.1
2	na	na	na	na	29.7	6.7	36.4	3.2
Varicella	na	na	na	na	59.3	13.0	72.3	65.3
All basic vaccinations[5]	0.0	0.0	0.0	-	57.7	5.9	63.6	46.5
All age appropriate vaccinations[6]	59.2	1.3	60.4	47.2	24.4	4.0	28.4	0.8
No vaccinations	0.0	8.4	8.4	na	0.0	8.0	8.0	na
Number of children	319	74	393	393	289	96	385	385

na = Not applicable
BCG = Bacille Calmette-Guérin
DTaPHibIPV = Diphtheria, pertussis, tetanus, polio, haemophilus influenzae type b
HepB = Hepatitis B
OPV = Oral polio vaccine
PCV = Pneumococcal conjugate vaccine
MMR = Measles, mumps, rubella
HepA = Hepatitis A
Varicella = Chickenpox
[1] Vaccination card, booklet or other home-based record
[2] Received by age 12 months
[3] For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life of those children are assumed to be the same as for children with a written record of vaccination.
[4] Received by age 12 months for all vaccines except one dose of MMR, second dose of OPV (by age 18 months), one dose of varicella and two doses of hepatitis A (by age 18 and 24 months).
[5] BCG, three doses of DTaP-Hib-IPV and one dose of MMR
[6] For children 12-23 months: BCG, three doses of DTaP-Hib-IPV, three doses of hepatitis B, first dose of OPV and three doses of PCV. For children 24-35 months, all of these plus a second dose of OPV, one dose of MMR, one dose of varicella and two doses of hepatitis A.

Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage with all basic vaccinations, and percentage with all age appropriate vaccinations, by background characteristics, Turkey DHS 2018 - Syrian Sample

	Children age 12-23 months:														Children age 24-35 months:							
		DTaPHibIPV			HepB				PCV			All age appropriate vaccinations[1]	No vaccinations	Number of children			HepA			All basic vaccinations[2]	All age appropriate vaccinations[3]	Number of children
Background characteristic	BCG	1	2	3	1	2	3	OPV 1	1	2	3				MMR	OPV 2	1	2	Varicella			
Sex																						
Male	83.7	83.8	77.1	66.2	88.8	85.4	72.6	77.3	81.6	74.6	68.2	57.7	9.6	220	83.7	56.2	65.6	37.5	74.1	65.4	28.0	185
Female	83.3	85.7	79.8	72.0	91.2	84.5	75.8	76.4	82.7	73.8	69.3	63.8	7.0	173	81.4	55.2	64.1	35.3	70.5	62.1	28.8	200
Birth order																						
1	87.0	84.7	81.3	73.4	89.8	85.5	81.9	78.7	83.9	80.2	74.2	64.0	8.5	124	84.6	60.7	69.9	41.6	74.7	67.8	35.3	139
2-3	82.7	84.9	77.5	69.5	90.5	85.5	73.8	76.9	80.8	71.4	68.9	61.5	8.1	171	78.4	52.9	65.9	32.8	70.3	61.0	23.4	135
4-5	74.7	81.4	72.2	58.3	86.1	79.9	61.4	73.2	78.4	67.6	58.3	49.5	10.8	68	78.7	47.3	51.8	27.4	65.5	57.4	23.9	69
6+	(94.1)	(90.5)	(84.5)	(69.1)	(95.2)	(91.7)	(71.5)	(77.4)	(90.5)	(81.0)	(67.9)	(64.3)	(4.8)	30	(95.0)	(62.1)	(66.4)	(45.3)	(81.5)	(68.8)	(29.4)	42
Vaccination card[4]																						
Seen	91.4	96.3	91.2	82.4	99.7	95.4	84.2	88.0	92.3	85.2	80.6	72.8	0.0	319	90.4	63.4	69.2	39.6	79.0	76.9	32.5	289
Not seen/ no card	49.1	34.4	22.4	9.5	47.3	40.1	30.1	28.6	37.7	26.7	16.7	6.7	45.1	74	58.7	32.6	51.7	26.7	52.1	23.8	16.1	96

Table 10.3 Vaccinations by background characteristics (continued)

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage with all basic vaccinations, and percentage with all age appropriate vaccinations, by background characteristics, Turkey DHS 2018 - Syrian Sample

	Children age 12-23 months:														Children age 24-35 months:							
		DTaPHibIPV			HepB				PCV			All age appropriate vaccinations[1]	No vaccinations	Number of children			HepA			All basic vaccinations[2]	All age appropriate vaccinations[3]	Number of children
Background characteristic	BCG	1	2	3	1	2	3	OPV 1	1	2	3				MMR	OPV 2	1	2	Varicella			
Mother's education																						
No educ / prim. incomp.	78.3	72.9	70.7	62.0	86.5	76.7	62.6	68.0	72.9	66.9	62.0	50.0	8.7	65	73.0	31.1	43.4	17.7	59.2	47.8	11.3	71
Complete primary	81.7	84.1	75.6	69.7	86.7	82.6	73.1	74.8	81.2	73.1	68.5	61.1	11.5	203	83.5	54.7	66.3	40.3	71.3	63.9	30.4	181
Complete secondary	90.7	93.4	90.7	74.7	98.7	93.3	88.0	88.0	90.7	84.0	77.4	66.7	1.3	79	84.8	68.1	72.8	36.6	79.2	70.9	30.1	76
Complete high school / higher	(86.3)	(88.6)	(79.5)	(63.6)	(93.2)	(93.2)	(70.4)	(79.5)	(84.0)	(72.7)	(63.6)	(61.3)	(6.8)	46	88.2	73.1	76.9	46.9	82.5	73.1	41.3	56
Total	83.5	84.7	78.3	68.7	89.9	85.0	74.0	76.9	82.1	74.2	68.7	60.4	8.4	393	82.5	55.7	64.9	36.4	72.3	63.6	28.4	385

Note: Children are considered to have received the vaccine if it was either written on the child's vaccination card or reported by the mother. For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life of those children are assumed to be the same as for children with a written record of vaccination. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] BCG, three doses of DTaP-Hib-IPV, three doses of hepatitis B, first dose of OPV and three doses of PCV

[2] BCG, three doses of DTaP-Hib-IPV and one dose of MMR

[3] BCG, three doses of DTaP-Hib-IPV, three doses of hepatitis B, two doses of OPV, three doses of PCV, one dose of MMR, one dose of varicella and two doses of hepatitis A.

[4] Vaccination card, booklet or other home-based record

Table 10.4 Possession and observation of vaccination cards

Percentage of children age 12-23 months and children age 24-35 months who ever had a vaccination card, and percentage with a vaccination card seen, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Children age 12-23 months			Children age 24-35 months		
	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children
Sex						
Male	90.1	78.9	220	87.6	74.5	185
Female	90.2	84.3	173	84.7	75.6	200
Birth order						
1	89.8	80.5	124	87.8	76.2	139
2-3	91.3	82.5	171	85.7	73.5	135
4-5	85.0	75.8	68	81.3	73.7	69
6+	(96.4)	(90.5)	30	(90.0)	(79.1)	42
Mother's education						
No educ / prim. incomp.	88.6	79.4	65	78.4	67.1	71
Complete primary	88.7	79.6	203	86.6	78.3	181
Complete secondary	96.0	86.7	79	86.2	71.8	76
Complete high school / higher	(88.6)	(81.8)	46	94.3	79.4	56
Total	90.1	81.3	393	86.1	75.1	385

Note: Figures in parenthesis are based on 25-49 unweighted cases.
[1] Vaccination card, booklet or other home-based record

NUTRITION OF CHILDREN AND WOMEN 11

Key Findings

- ***Child nutrition:*** 17% of children under age 5 are short for their age (stunted), 2% are thin (wasted), 4% of are underweight, and 10% are overweight.
- ***Breastfeeding:*** 94% of children are breastfed at some point in their life. Contrary to recommendations, 24% receive a prelacteal feed.
- ***Early breastfeeding:*** Among children under age 2, 73% were breastfed within 1 hour of birth.
- ***Exclusive breastfeeding:*** 52% of infants under age 6 months are exclusively breastfed, and the median duration of exclusive breastfeeding is 3 months.
- ***Maternal nutrition:*** 3% of women age 15-49 are too thin. More than half (60%) of women are overweight or obese.

This chapter reports on nutritional status among children and women for Syrian sample. It also reports on infant and young child feeding practices, including breastfeeding and complementary feeding, and micronutrient supplementation for Syrian children living in Turkey.

11.1 NUTRITIONAL STATUS OF CHILDREN

Similar to Turkey sample, in Syrian sample the anthropometric data collected for all children under five years of age. Both weight and height (length) measurements were obtained for all children under 5 years of age whose mother was interviewed in the survey to assess the nutritional status of Syrian children in Turkey. Anthropometric information is used to calculate standard indices: height-for-age, weight-for-height, and weight-for-age. The indices are employed to examine malnutrition among children.

Stunting (assessed via height-for-age)

Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted), or chronically undernourished. Children who are below minus three standard deviations (-3 SD) are considered severely stunted.

Sample: Children under age 5 born to interviewed women

Wasting (assessed via weight-for-height)

The weight-for-height index measures body mass in relation to body height or length and describes acute nutritional status. Children whose Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted), or acutely undernourished. Children whose weight-for-height Z-score is below minus three standard deviations (-3 SD) from the median of the reference population are considered severely wasted.

Sample: Children under age 5 born to interviewed women

Underweight (assessed via weight-for-age)

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic undernutrition. Children whose weight-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose weight-for-age Z-score is below minus three standard deviations (-3 SD) from the median are considered severely underweight.

Sample: Children under age 5 born to interviewed women

Overweight (assessed via weight-for-height)

Children whose weight-for-height Z-score is more than 2 standard deviations (+2 SD) above the median of the reference population are considered overweight.

Sample: Children under age 5 born to interviewed women

11.1.1 Anthropometry Training and Data Collection

Interviewers were trained to measure the height and weight of children and women. Children younger than age 24 months were measured lying down (recumbent length); older children and women were measured standing up (height). Weight measurements were taken using SECA scales with a digital display (model number SECA 881 1021659). Height and length were measured with a Shorr Productions® measuring board.

The survey identified a total of 1,903 children under age 5 to be eligible for height and weight measurement. Valid height-for-age measurements were taken for 87% of eligible children. Valid weight-for-height measurements were taken for 90% of eligible children. Valid weight-for-age measurements were taken for 87% of eligible children. Appendix C provides additional information on completeness and quality of anthropometry data for children in Syrian sample.

11.1.2 Levels of Child Malnutrition

Overall, 17% of children under age 5 is stunted, with 6% is classified as severely stunted (**Table 11.1**). A very small percentage of Syrian children in Turkey are wasted, less than 2% and less than 1% are severely wasted. The proportion of underweight children is 4%. More than 10% of children under 5 years of age are overweight.

Patterns by background characteristics

- The prevalence of stunting fluctuates with age of the children, but it peaks at age 18-23 months (26%). This represents the impact of undernutrition in the first 1,000 days of life. Wasting is prevalent in children under 24 months of age, and is highest 3% among children less than 6 months (**Table 11.1**).

- The prevalence of overweight children is the highest for children under 6 months (20%) and it is also relatively high for children between 12 and 23 month of age. Overweight is slightly more common among male (12%) than female children (9%).

- Children with small or very small size at birth have a higher proportion of stunting (20% and 25%) and wasting (2% and 4%) compared to those reported as average or larger. Overweight varies by size at birth, yet there are not pronounced differences among the categories (ranges from 7% to 11%).

11.2 Infant and Young Child Feeding Practices

Appropriate infant and young child feeding (IYCF) practices include early initiation of breastfeeding within the first hour of life, exclusive breastfeeding for the first 6 months of life, continued breastfeeding for two years or more, and introducing safe, appropriate, and adequate complementary foods at 6 months of age (WHO, 2008).

11.2.1 Early Initiation of Breastfeeding

Initiation of breastfeeding within the first hour of life is important for both the mother and the child. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also encourages bonding between the mother and her newborn, facilitating the production of regular breast milk. Therefore, it is suggested that newborns be put to the breast immediately to ensure that they are breastfed within 1 hour after birth; in addition, prelacteal feeding (feeding newborns any foods/liquids before breast milk is regularly produced) should be discouraged.

Early initiation of breastfeeding
Initiation of breastfeeding within 1 hour of birth
Sample: Last born children who were born in the 2 years before the survey

Table 11.2 shows that breastfeeding is very common among Syrian immigrants in Turkey. Among children born in the 2 years before the survey, 94% were breastfed. More than seven in ten children (73%) were breastfed within 1 hour of birth, and 86% were breastfed within 1 day of birth. Contrary to recommendations, 24% of breastfeeding children received a prelacteal feed.

Patterns by background characteristics

- Initiation of breastfeeding within one hour of birth is common among births irrespective of their sex (73% for males, 74% for females).

- Prelacteal feeding is not a recommend infant feeding practice, however the practice is prevalent among Syrian mothers with high school or higher education (28%).

11.2.2 Exclusive Breastfeeding

Breast milk contains all the nutrients needed by children during their first 6 months of life. It is recommended that in the first 6 months of their life, children be given nothing but breast milk, that is, be exclusively breastfed. Exclusive breastfeeding for 6 months prevents infections such as diarrhea and respiratory illnesses, and provides all the nutrients and liquid an infant requires for optimal growth and development. Feeding complementary foods within the first 6 months will have the adverse effect of reducing breast milk output, because the production and release of breast milk is modulated by the frequency and intensity of suckling.

Exclusive breastfeeding

Proportion of children 0-5 months of age who are fed exclusively with breastmilk

Sample: Last born children who were born in the 2 years before the survey

In 2018 TDHS, more than half of Syrian children under 6 months of age in Turkey are exclusively breastfed (%52) (**Table 11.3**). The proportion of children exclusively breastfed declines rapidly with age, especially after 6 months. It decreases from 75% among children age 0-1 months to 6% among those age 6-8 months (**Table 11.3** and **Figure 11.1**). Contrary to the recommendation that children under 6 months should be exclusively breastfeed, 18% of children receive breast milk with other milk and 8% of children receive complementary foods in addition to breast milk.

***Figure 11.1* Breastfeeding practices by age**
Percentage of Syrian children under age 2

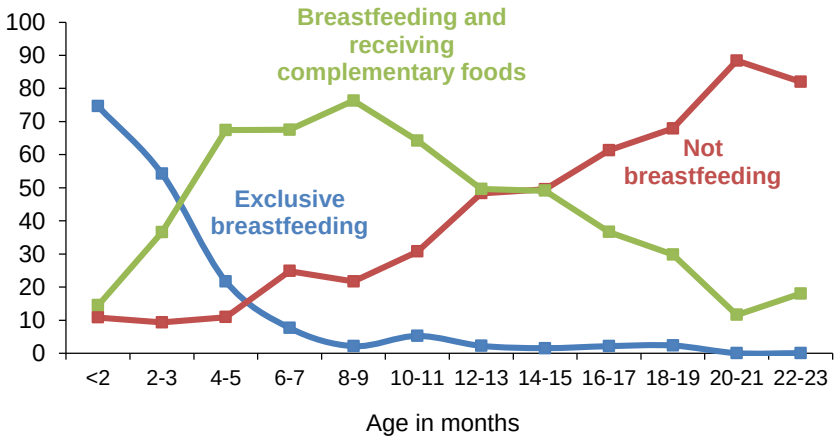


***Figure 11.2* IYCF indicators on breastfeeding status**
Percentage of Syrian children under age 2

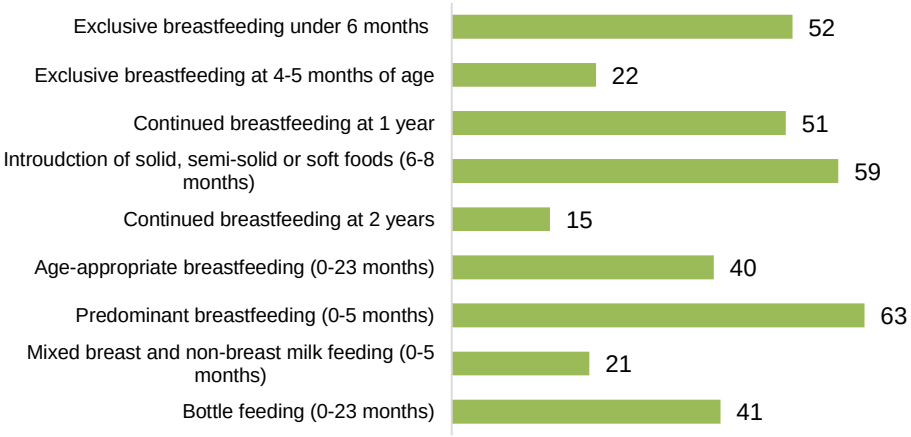


Figure 11.2 and **Table 11.4** show that 40% of children under age 2 are receiving age-appropriate breastfeeding. Fifty-nine percent of children are introduced to solid, semisolid, or soft foods at 6-8 months. Half of the Syrian children continue breastfeeding at age 1, however only 15% of children continue breastfeeding until their second birthday.

11.2.3 Median Duration of Breastfeeding

Table 11.5 shows that the median duration of any breastfeeding among children born in the 3 years before the survey is 13.7 months. Overall, median duration of exclusive breastfeeding (i.e., the time by which half of children have stopped exclusive breastfeeding) is 3.1 months, and median duration of predominant breastfeeding (either exclusively breastfed or breastfed with plain water and/or non-milk liquids) is 4.3 months.

Patterns by background characteristics

- The median duration of breastfeeding among Syrian children is exactly the same for males and females (13.7) (**Table 11.5**).

11.2.4 Bottle Feeding

The nipple on a feeding bottle is susceptible to contamination and increases the risk of disease among children using a bottle with a nipple. Thus, feeding children from a bottle with a nipple is not recommended for children under 2 years of age (WHO, 2005).

Bottle feeding
Proportion of children age 0-23 months who are fed from a bottle with a nipple
Sample: Last born children who were born in the 2 years before the survey

Bottle feeding is common in among all Syrian children age 0-23 months, 41% were fed with a bottle on the day or night before the survey (**Figure 11.2**). The proportion of children who are fed with a bottle rises steadily until the age of 6 months, then it shows variation between 6 to 23 months. For the first 6 months after birth, 33% of Syrian children are fed with a bottle (**Table 11.3**).

11.2.5 Introduction of Complementary Foods

After the first 6 months, breast milk alone is no longer enough to meet the nutritional needs of an infant. After 6 months, appropriate complementary foods should be introduced while continuing to breastfeed until age 2 or older. The transition from exclusive breastfeeding to complementing with family foods is when children are most vulnerable to becoming undernourished and during this time it is important they receive solid, semi-solid, or soft foods.

Appropriate complementary feeding should include feeding children a variety of foods to ensure that nutrient requirements are met. Fruits and vegetables rich in vitamin A should be consumed daily. Eating a range of fruits and vegetables, in addition to those rich in vitamin A, is also important. Studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients. Therefore, it has been recommended that meat, poultry, fish, or eggs should be part of the daily diet, or eaten as often as possible (WHO, 2003).

Table 11.6 indicates the types of foods and liquids received by children under age 2 living with their mother during the day and night before the interview by their age and breastfeeding status. The most common foods given to breastfed and nonbreastfed children age 6 to 23 months are solid or semi-solid foods (75% and 89%, respectively). This is followed by cheese, yogurt and other milk products for breastfeeding children (50%). For nonbreastfeeding children, other milk is the second-most consumed food/liquid (67%). Meat, fish and poultry consumption are the least commonly given foods for breastfeeding children age 6 to 23 months (5%) and nonbreastfeeding children age 6 to 23 months (7%). Similarly, food made from legumes and nuts, are less commonly given to breastfeeding (9%) and nonbreastfeeding (15%) children. Consumption of infant formula among children age 6 to 23 months is rare among breastfeeding children (10%). The percentage of consuming infant formula is doubled for nonbreastfeeding children (20%).

11.3 Micronutrient Intake among Children

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through direct supplementation.

Overall, 33% of children age 6-23 months consumed foods rich in iron during the 24 hours before the interview (**Table 11.7**).

Patterns by background characteristics

- The intake of iron-rich foods tends to increases with the age of the child from 9% among children 6-8 months to 45% among children age 18-23 months.
- The percentage of children consuming iron-rich foods is higher among nonbreastfed children (39%) compared with breastfed ones (27%).
- Intake of iron-rich foods increases with increasing mother's education from 27% among mothers with no education or primary incomplete to 39% and to 35% among those at complete secondary level and the highest educational level, respectively.

11.4 WOMEN'S NUTRITIONAL STATUS

Chronic energy deficiency is caused by eating too little or having an unbalanced diet that lacks adequate nutrients. Women of reproductive age are especially vulnerable to chronic energy deficiency and malnutrition due to low dietary intakes, inequitable distribution of food within the household, improper food storage and preparation, dietary taboos, infectious diseases, and inadequate care practices. It is well known that chronic energy deficiency leads to low productivity among adults and is related to heightened morbidity and mortality. In addition, chronic undernutrition among women is a major risk factor for adverse birth outcomes.

In order to assess women's nutritional status, women were weighed and their heights measured using the same equipment used to obtain children's measurements (i.e., an electronic scale and wooden height board). The weight and Body Mass Index (BMI) distributions presented in this section exclude pregnant women and women with a birth within the 2 months prior to the measurement.

The height of women is important in terms of mother and child health, because maternal height is useful in predicting the risk of delivery complications as short stature is frequently associated with a small pelvis size. The height below which women are considered to be at risk of such complications is in the range of 140-150 centimeters, with 145 centimeters being the widely accepted cutoff for identifying maternal malnutrition.

Body mass index (BMI)

BMI is calculated by dividing weight in kilograms by height in meters squared (kg/m^2).

Status	BMI
Too thin for their height	Less than 18.5
Normal	Between 18.5 and 24.9
Overweight	Between 25.0 and 29.9
Obese	Greater than or equal to 30.0

Sample: Women age 15-49 who are not pregnant and who have not had a birth in the 2 months before the survey, and men age 15-49

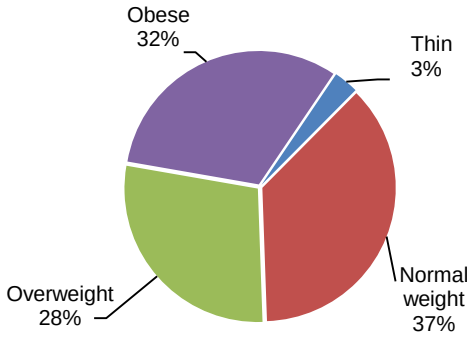
Short Stature

Proportion of women with height under 145cm.

Sample: Women age 15-49

Thirty-seven percent of Syrian women have a normal BMI, whereas 60% are overweight or obese and 3% are thin (**Table 11.8** and **Figure 11.3**). Women's mean BMI (27.4 kg/m2) falls within the range considered as overweight. Less than two percent of women age 15-49 are of short stature (below 145 centimetres) (**Table 11.8).**

***Figure 11.3* Nutritional status of Syrian women**
Percent distribution of Syrian women age 15-49



Patterns by background characteristics

- Both short stature and overweight or obesity decreases with increasing level of education and wealth status. For example, 70% of women with no education or incomplete primary are overweight or obese compared with 49% of those with complete high school or higher education.

- Strikingly, 92% of women aged 40-49 are overweight or obese, and 66% of women in this age group are obese.

List of Tables

For more information on nutrition of children and adults, see the following tables:

- **Table 11.1 Nutritional status of children**
- **Table 11.2 Initial breastfeeding**
- **Table 11.3 Breastfeeding status by age**
- **Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status**
- **Table 11.5 Median duration of breastfeeding**
- **Table 11.6 Foods and liquids consumed by children in the day or night preceding the interview**
- **Table 11.7 Micronutrient intake among children**
- **Table 11.8 Nutritional status of women**

Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, according to background characteristics, Turkey DHS 2018 - Syrian Sample

	Height-for-age[1]				Weight-for-height					Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months														
<6	4.6	9.4	0.0	217	1.5	3.0	20.2	0.6	209	2.6	4.2	8.3	0.5	219
6-8	6.8	12.6	-0.2	73	2.9	2.9	3.4	0.2	73	2.9	6.3	3.4	-0.1	73
9-11	3.1	9.4	-0.2	101	1.0	2.9	7.2	0.3	108	2.4	4.5	3.1	0.1	102
12-17	6.9	18.5	-0.9	169	0.6	2.5	12.8	0.7	168	1.9	2.7	4.3	0.1	172
18-23	8.1	25.5	-1.0	186	0.5	2.7	17.8	1.0	196	1.1	2.8	6.7	0.2	189
24-35	7.2	19.0	-1.0	335	0.0	1.2	8.8	0.6	351	0.3	3.1	3.6	-0.1	338
36-47	5.8	18.1	-1.1	284	0.0	1.2	6.0	0.6	298	0.6	2.4	1.6	-0.2	284
48-59	4.4	19.0	-1.0	287	0.7	1.0	6.4	0.5	310	1.1	4.6	1.9	-0.3	285
Sex														
Male	7.4	19.9	-0.8	865	0.7	2.3	11.6	0.6	903	1.7	4.8	4.2	-0.0	867
Female	4.3	14.7	-0.7	786	0.5	1.4	9.0	0.6	808	0.9	2.1	3.7	0.0	795
Birth interval in months[3]														
First birth[4]	5.0	17.0	-0.8	505	0.2	1.4	10.7	0.6	517	1.5	3.2	3.8	-0.0	513
<24	8.0	19.0	-0.8	435	0.0	1.2	10.4	0.6	455	0.8	3.6	5.2	-0.0	434
24-47	6.5	20.2	-0.8	492	1.2	2.0	9.9	0.6	518	1.7	3.8	3.1	-0.1	493
48+	2.9	8.9	-0.6	219	1.4	3.8	10.5	0.6	222	1.0	3.5	4.1	0.1	222
Size at birth[3]														
Very small	11.3	24.8	-1.0	118	0.9	4.3	9.7	0.4	123	6.2	11.5	2.7	-0.4	119
Small	4.4	19.9	-1.0	248	0.4	2.4	6.9	0.4	259	2.4	5.8	3.0	-0.3	249
Average or larger	5.7	16.3	-0.7	1,247	0.7	1.5	11.4	0.7	1,287	0.6	2.4	4.3	0.1	1,255
Missing	(5.6)	(15.9)	1.1	37	(0.0)	(2.6)	(2.5)	-0.5	41	(0.0)	(0.0)	(2.8)	0.3	39
Mother's nutritional status[5]														
Thin (BMI<18.5)	(9.6)	(30.4)	1.4	40	(0.0)	(2.7)	(5.3)	-0.5	39	(2.6)	(4.3)	(0.0)	0.4	40
Normal (BMI 18.5-24.9)	6.1	20.4	-0.9	619	0.5	1.2	7.3	0.5	638	0.4	3.4	2.8	-0.1	625
Overweight/ obese (BMI >= 25)	5.7	15.1	-0.7	985	0.7	2.3	12.4	0.7	1,031	1.8	3.6	4.8	0.1	993
Residence														
Non-camp	5.9	17.4	-0.8	1,582	0.6	1.9	10.6	0.6	1,639	1.3	3.4	4.0	0.0	1,592
Camp	7.7	17.3	-1.0	69	0.0	0.5	5.8	0.5	73	2.0	5.0	2.5	-0.3	70
Mother's education														
No educ / prim. incomp.	5.6	16.8	-0.7	258	0.7	1.1	11.0	0.6	300	1.2	4.4	5.4	-0.0	263
Complete primary	6.7	17.3	-0.8	826	0.9	2.3	11.3	0.6	849	1.3	3.6	4.6	-0.0	836
Complete secondary	4.7	19.1	-0.8	332	0.3	2.6	8.6	0.6	327	2.0	3.3	2.1	0.0	330
Complete high school / higher	5.4	16.2	-0.7	233	0.0	0.4	8.6	0.6	236	0.6	2.4	2.7	0.0	233
Total	5.9	17.4	-0.8	1,651	0.6	1.9	10.4	0.6	1,711	1.3	3.5	4.0	-0.0	1,662

Note: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards. Figures in parenthesis are based on 25-49 unweighted cases.
[1] Recumbent length is measured for children under age 2; standing height is measured for all other children.
[2] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median
[3] Excludes children whose mothers were not interviewed
[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval
[5] Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 11.8

Table 11.2 Initial breastfeeding

Among last-born children who were born in the 2 years preceding the survey, percentage who were ever breastfed and percentages who started breastfeeding within 1 hour and within 1 day of birth; and among last-born children born in the 2 years preceding the survey who were ever breastfed, percentage who received a prelacteal feed, according to background characteristics, Turkey DHS 2018 - Syrian Sample

	Among last-born children born in the past 2 years:				Among last-born children born in the past 2 years who were ever breastfed:	
Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	93.4	72.5	84.8	419	27.6	391
Female	94.9	74.1	87.8	340	19.0	323
Residence						
Non-camp	94.4	73.8	86.4	730	23.4	688
Camp	88.0	57.8	79.5	29	30.1	26
Mother's education						
No educ / prim. incomp.	93.0	78.5	86.4	116	16.6	108
Complete primary	93.9	67.4	84.4	381	26.9	358
Complete secondary	96.9	79.6	90.5	149	17.8	144
Complete high school / higher	92.2	78.8	86.0	113	28.0	104
Total	94.1	73.2	86.1	759	23.7	714

Note: Table is based on last-born children born in the 2 years preceding the survey regardless of whether the children are living or dead at the time of interview.

[1] Includes children who started breastfeeding within one hour of birth

[2] Children given something other than breast milk during the first three days of life

Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under age 2 using a bottle with a nipple, according to age in months, Turkey DHS 2018 - Syrian Sample

	Breastfeeding status										
Age in months	Not breast-feeding	Exclusively breastfed	Breast-feeding and consu-ming plain water only	Breast-feeding and consu-ming non milk liquids[1]	Breast-feeding and consu-ming other milk	Breast-feeding and consu-ming comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest children under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	10.8	74.6	3.7	0.0	10.8	0.0	100.0	89.2	84	23.5	86
2-3	9.3	54.2	7.5	1.4	24.8	2.8	100.0	90.7	75	34.1	76
4-5	10.9	21.7	24.1	0.0	19.7	23.6	100.0	89.1	71	41.4	71
6-8	23.4	5.8	9.8	2.7	14.3	44.1	100.0	76.6	79	46.8	80
9-11	28.7	4.7	10.3	0.9	10.9	44.6	100.0	71.3	113	41.3	117
12-17	52.6	1.9	4.3	0.6	1.4	39.1	100.0	47.4	170	42.4	184
18-23	79.7	0.7	1.4	0.0	0.7	17.6	100.0	20.3	152	47.5	209
0-3	10.1	65.0	5.5	0.7	17.4	1.3	100.0	89.9	160	28.5	162
0-5	10.4	51.6	11.3	0.5	18.1	8.2	100.0	89.6	231	32.5	233
6-9	23.4	5.1	8.0	2.9	14.9	45.8	100.0	76.6	110	42.6	113
12-15	49.0	1.8	3.5	0.9	2.0	42.8	100.0	51.0	120	41.0	127
12-23	65.4	1.3	2.9	0.3	1.1	28.9	100.0	34.6	323	45.1	393
20-23	84.8	0.0	2.0	0.0	0.0	13.3	100.0	15.2	106	48.8	149

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

[1] Non-milk liquids include juice, juice drinks, clear broth or other liquids

Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status

Percentage of children fed according to various IYCF practices, Turkey DHS 2018 - Syrian Sample

Indicator	Indicator numerator and denominator	Value
Exclusive breastfeeding under 6 months	Percentage exclusively breastfed	51.6
	Number of children age 0-5 months	231
Exclusive breastfeeding at 4-5 months of age	Percentage exclusively breastfed	21.7
	Number of children age 4-5 months	71
Continued breastfeeding at 1 year	Percentage currently breastfeeding	51.0
	Number of children age 12-15 months	120
Introduction of solid, semi-solid or soft foods (6-8 months)	Percentage of children age 6-8 months who received any solid, semi-solid or soft foods during the previous day	59.3
	Number of youngest children age 6-8 months living with the mother	79
Continued breastfeeding at 2 years	Percentage currently breastfeeding	15.2
	Number of children age 20-23 months	106
Age-appropriate breastfeeding (0-23 months)	Percentage with age-appropriate breastfeeding[1]	39.9
	Number of youngest children age 0-23 months of age living with the mother	745
Predominant breastfeeding (0-5 months)	Percentage with predominant breastfeeding[2]	63.3
	Number of children age 0-5 months	231
Mixed breast and non-breast milk feeding (0-5 months)	Percentage with mixed breast and non-breast milk feeding[3]	20.6
	Number of children age 0-5 months	231
Bottle feeding (0-23 months)	Percentage using a bottle with a nipple	41.2
	Number of children age 0-23 months	824

[1] For children age 0-5 months: exclusively breastfed, for children age 6-23 months: received breastmilk and complementary foods

[2] Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

[3] Received breast milk and fresh, tinned, or powdered animal milk, or commercial infant formula

Table 11.5 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Median duration (months) of breastfeeding among children born in the past 3 years[1]		
	Any breast-feeding	Exclusive breast-feeding	Predo-minant breast-feeding[2]
Sex			
Male	13.7	(2.9)	4.2
Female	13.7	3.3	4.5
Mother's education			
No educ. / prim. incomp.	(11.9)	(3.6)	(5.2)
Complete primary	14.4	(2.7)	4.1
Complete secondary	(14.3)	(3.4)	(4.6)
Complete high school / higher	(13.4)	(3.3)	(4.0)
Total	13.7	3.1	4.3
Mean for all children	14.5	4.5	6.3

Note: Median and mean durations are based on breastfeeding status of the child at the time of the survey (current status). Includes living and deceased children. Figures in parenthesis are based on 25-49 unweighted cases.

[1] For last-born children under age 24 months who live with the mother and are breastfeeding, information to determine exclusive and predominant breastfeeding comes from a 24-hour dietary recall. Tabulations assume that last-born children age 24 months or older who live with the mother and are breastfeeding are neither exclusively nor predominantly breastfed. It is assumed that last-born children not currently living with the mother and all non-last-born children are not currently breastfeeding.

[2] Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only.

Table 11.6 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Turkey DHS 2018 - Syrian Sample

	Liquids			Solid or semi-solid foods								
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Food made from grains	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Number of children under age 2
BREASTFEEDING CHILDREN												
0-1	9.3	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	75
2-3	17.0	15.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	3.1	3.1	68
4-5	15.0	17.7	5.0	7.2	8.3	0.0	0.0	0.0	0.0	19.3	28.2	64
6-8	22.1	22.1	20.9	22.7	23.8	0.0	0.0	0.0	8.7	46.5	57.5	60
9-11	8.3	36.3	37.6	32.3	32.3	0.0	7.9	5.2	22.3	45.4	71.6	80
12-17	5.2	31.0	42.4	41.5	43.2	0.0	14.8	5.2	35.8	54.6	87.8	81
18-23	(4.5)	(34.1)	(28.5)	(61.4)	(65.9)	(0.0)	(17.0)	(17.2)	(30.7)	(55.7)	(86.4)	31
6-23	10.2	30.9	34.0	36.5	37.9	0.0	9.3	5.4	24.4	49.9	75.2	252
Total	11.7	22.6	20.1	21.0	22.0	0.0	5.1	3.0	13.4	30.5	45.7	460
NONBREASTFEEDING CHILDREN												
0-1	*	*	*	*	*	*	*	*	*	*	*	9
2-3	*	*	*	*	*	*	*	*	*	*	*	7
4-5	*	*	*	*	*	*	*	*	*	*	*	8
6-8	*	*	*	*	*	*	*	*	*	*	*	18
9-11	(32.7)	(85.9)	(43.4)	(31.6)	(35.8)	(0.0)	(9.8)	(3.3)	(9.8)	(51.1)	(77.2)	32
12-17	27.6	70.9	38.3	34.2	47.6	0.0	15.7	4.7	39.8	60.2	89.0	90
18-23	10.1	58.6	52.8	56.2	59.6	0.0	17.1	9.8	43.8	62.9	96.5	121
6-23	19.9	66.7	43.4	42.9	49.7	0.0	14.9	6.6	36.0	58.1	89.4	262
Total	22.2	65.3	39.7	39.4	45.6	0.0	13.7	6.0	33.0	53.2	82.0	286

Note: Breastfeeding status and food consumed refer to a 24-hour" period (yesterday and last night). Figures in parenthesis are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Other milk includes fresh, tinned and powdered cow or other animal milk

[2] Doesn't include plain water

Table 11.7 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, percentages who consumed iron-rich foods in the 24 hours preceding the survey according to background characteristics,Turkey DHS 2018 - Syrian Sample

Background characteristic	Percentage who consumed foods rich in iron in last 24 hours[1]	Number of children
Age in months		
6-8	9.4	79
9-11	22.4	113
12-17	41.0	170
18-23	44.9	152
Sex		
Male	30.5	297
Female	37.0	217
Breastfeeding status		
Breastfeeding	27.3	252
Not breastfeeding	39.1	261
Missing	*	1
Mother's age		
15-19	31.4	85
20-29	34.4	314
30-39	30.9	108
40-49	*	7
Residence		
Non-camp	33.2	494
Camp	35.1	20
Mother's education		
No educ. / prim. incomp.	27.4	83
Complete primary	32.6	255
Complete secondary	38.6	101
Complete high school / higher	34.9	74
Total	33.2	514

Note:.An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes meat, fish, poultry and eggs.

Table 11.8 Nutritional status of women

Among women age 15-49, percentage with height under 145 cm, mean Body Mass Index (BMI), and percentage with specific BMI levels, according to background characteristics, Turkey DHS 2018 - Syrian Sample

	Height		Body Mass Index[1]								
Background characteristic	Percen- ta- ge below 145 cm	Number of women	Mean Body Mass Index (BMI)	18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moderat- ely and severely thin)	>=25.0 (Total over- weight or obese)	25.0-29.9 (Over- weight)	>=30.0 (Obese)	Number of women
Age											
15-19	1.8	461	23.4	61.4	7.3	5.6	1.7	31.3	23.0	8.3	379
20-29	1.7	860	25.8	45.8	3.4	2.5	0.9	50.9	31.0	19.9	631
30-39	1.4	563	29.4	24.4	0.9	0.9	0.0	74.7	30.7	43.9	489
40-49	3.0	301	32.8	8.4	0.1	0.1	0.0	91.5	25.5	65.9	301
Residence											
Non-camp	1.8	2,097	27.5	36.9	3.0	2.3	0.7	60.1	28.4	31.8	1,725
Camp	1.6	88	27.1	39.2	3.3	2.8	0.5	57.5	27.6	29.9	75
Education											
No educ. / prim. incomp.	3.0	420	29.2	26.8	2.8	2.5	0.3	70.4	27.4	42.9	351
Complete primary	2.4	1,041	27.9	36.3	1.4	1.1	0.3	62.3	26.9	35.5	858
Complete secondary	0.5	421	26.0	42.7	5.7	4.4	1.3	51.6	29.5	22.2	352
Complete high school / higher	0.0	304	25.2	46.2	4.9	3.4	1.5	48.9	33.2	15.6	239
Total	1.8	2,185	27.4	37.0	3.0	2.3	0.7	60.0	28.3	31.7	1,800

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m2).
[1] Excludes pregnant women and women with a birth in the preceding 2 months

ABORTIONS AND STILLBIRTHS 12

Key Findings

- ***Spontaneous abortions:*** Among ever married Syrian migrant women, 27% had at least one spontaneous abortion. Among all pregnancies in the 5 years preceding survey date, 15% ended with this outcome.
- ***Stillbirths: 3%*** of ever married Syrian migrant women reported having had a stillbirth. There was 1 stillbirth per 100 pregnancies in the 5 years preceding survey date.
- ***Induced abortions:*** The proportion of ever married Syrian migrant women who had at least one abortion is 5%. The percentage of pregnancies ending with abortions in the 5 years preceding survey date is 2%.

Spontaneous abortions and stillbirths are strictly medical, yet induced abortions are also important from a maternal health perspective, since the practice can adversely affect a woman's health, reduce her chances for further childbearing, and contribute to maternal and perinatal mortality. Induced abortions may be impacted by family planning services: they are likely to become more common if there are problems with availability and accessibility of contraceptive services. Likewise, the level of induced abortions is likely to increase in the case of contraceptive failure.

In Syria, induced abortion is prohibited by Articles 525–532 of the Penal Code, including for women who have been raped, and in Turkey, it was legalized in 1983 with the enactment of a law on population planning. This law ensured safe abortions during the first ten weeks of gestation for every woman who requested the service. Ever since, induced abortions have been available at government hospitals, for a nominal fee, as well as in private institutions.

This chapter presents the findings concerning spontaneous abortions (miscarriages), stillbirths and induced abortions, where more detail is provided for induced abortions than the other types of pregnancy terminations.

12.1 SPONTANEOUS ABORTIONS

Number of spontaneous abortions per 100 pregancies

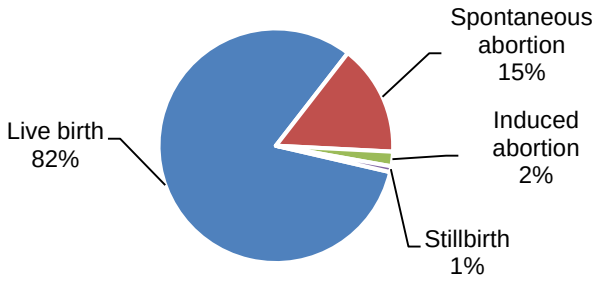
The number of spontaneous abortions per 100 completed pregnancies occurring within the 5 years preceding survey date (as reported by respondents)

Sample: Women age 15-49

The results of the 2018 TDHS Syrian Sample showed that about one in four ever married women (27%) had at least one spontaneous abortion (**Table 12.1**). The lifetime mean number of spontaneous abortions was 0.48. According to **Table 12.2**, there were 15 spontaneous abortions per 100 pregnancies (**Figure 12.1**).

***Figure 12.1* Pregnancy outcomes**

Pregnancy outcomes among Syrian women per 100 pregnancies for the 5-year period prior to 2018



12.2 STILLBIRTHS

Number of stillbirths per 100 pregancies

The number of stillbirths per 100 completed pregnancies occurring within the 5 years preceding survey date (as reported by respondents)

Sample: Women age 15-49

The level of stillbirths of Syrian migrants in Turkey is low. In 2018 TDHS Syrian Sample, 3% of women reported having had a stillbirth, and women had 0.04 stillbirths on average in their lifetime (**Table 12.1**). The number of stillbirths per 100 pregnancies was 1 (**Table 12.2** and **Figure 12.1**).

12.3 INDUCED ABORTIONS

Proportion of ever married women who had an induced abortion

The proportion of ever married women reporting having had at least one induced abortion in a lifetime

Sample: Women age 15-49

Induced abortions per 100 pregancies

The proportion of all pregnancies completed within the 5 years preceding survey date that ended with an induced abortion

Sample: Women age 15-49

The findings of 2018 TDHS Syrian Sample showed that 5% of women had at least one induced abortion, with a lifetime average of 0.07 abortions per women (**Table 12.1**). Within all pregnancies in the last 5 years, 2% ended in induced abortions (**Table 12.2** and **Figure 12.1**).

Patterns by background characteristics

- The proportion of women ever having an induced abortion increases from 1% of ever-married women aged 15-19 to 10% among women age 40-49 (**Table 12.3**).
- As the number of living children increases, the proportion of women who have ever had an induced abortion also increases, except for women with no living children. The proportion of women with 5 or more children who had an induced abortion is more than double that of women with one living child (5% and 2% respectively). For women with no children it was 3%.

- Primary school graduation is the level of education with the highest level of abortions (6%), the lowest levels were observed for women who are high school or higher graduates (3%).

- **Table 12.4** displays the number of induced abortions per 100 pregnancies during the 5-year period before the survey. While only 1% of the pregnancies ended with an induced abortion for 15-19 age group, it was 9% for women age 40-44.

12.3.1 Rates of Induced Abortion

Total abortion rate (TAR)

The average number of abortions a woman would have by the end of her childbearing years if she had abortions at the current age-specific abortion rates. Age-specific abortion rates are calculated for the 5 years before the survey, based on detailed pregnancy histories provided by women.

Sample: Women age 15-49

Age specific abortion rates for the 5-year period preceding the survey are displayed in Table **12.5**. The age-specific rates represent the probability that a woman in a particular age category will have an abortion during a 1-year period.

The TAR is 0.15 for the 5 years preceding 2018 TDHS Syrian Sample. Abortion rates have an inverse U relationship with age, in other words, age-specific abortion rates are increasing and peak among women in the 25-29 age group and then decline among older women. However, there is an increase again for women age 40-44.

TAR only changes slightly by education (between 0.14 and 0.16) (**Table 12.6**).

List of Tables

For more information on abortions and stillbirths, see the following tables:

- **Table 12.1 Number of abortions and stillbirths**
- **Table 12.2 Abortions and stillbirths per 100 pregnancies**
- **Table 12.3 Lifetime experience of induced abortions**
- **Table 12.4 Induced abortions per 100 pregnancies**
- **Table 12.5 Age specific and total induced abortion rates**
- **Table 12.6 Total abortion rates by education**

Table 12.1 Number of abortions and stillbirths

Percent distribution of ever-married women by number of abortions (spontaneous and induced) and stillbirths, Turkey DHS 2018 - Syrian Sample

	Abortions		
	Spontaneous	Induced	Stillbirths
Number of terminations			
None	72.6	95.0	97.1
1	16.6	3.5	2.4
2	5.9	1.0	0.3
3	1.9	0.3	0.0
4	1.7	0.2	0.1
5 or more	1.3	0.0	0.1
At least 1	27.4	5.0	2.9
Total	100.0	100.0	100.0
Mean number	0.48	0.07	0.04
Number of women	1,847	1,847	1,847

Table 12.2 Abortions and stillbirths per 100 pregnancies

Number of abortions (spontaneous and induced) and stillbirths per 100 pregnancies by all women during the 5-year period before the survey Turkey DHS 2018 - Syrian Sample

	Number per 100 pregnancies
Outcome	
Abortions	17.4
Spontaneous	15.3
Induced	2.0
Stillbirths	0.8
Number	2,283

Table 12.3 Lifetime experience of induced abortions

Percentage of ever-married women ever having an induced abortion, by selected background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristics	Abortions Induced	Number
Age		
15-19	1.4	227
20-24	1.6	421
25-29	5.6	373
30-34	5.0	301
35-39	7.5	233
40-44	10.3	174
45-49	9.5	118
Number of living children		
0	2.7	206
1-2	2.0	314
3-4	3.8	355
5+	4.6	292
Residence		
Non- camp	5.0	1,776
Camp	5.4	72
Education		
No educ / prim. incomp.	4.5	350
Complete primary	5.7	899
Complete secondary	4.8	350
Complete high school / higher	3.4	248
Total	5.0	1,847

Table 12.4 Induced abortions per 100 pregnancies

Number of induced abortions per 100 pregnancies during the 5-year period before the survey, by selected background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristics	Number per 100 pregnancies
Age	
15-19	1.2
20-24	1.4
25-29	3.4
30-34	1.9
35-39	2.2
40-44	8.8
45-49	0.0
Residence	
Non- camp	2.1
Camp	1.4
Education	
No educ / prim. incomp.	2.4
Complete primary	1.8
Complete secondary	2.4
Complete high school / higher	1.8
Total	2.0

Table 12.5 Age-specific and total induced abortion rates

Age-specific and cumulative abortion rates for the 5 year period preceding the survey, Turkey DHS 2018 – Syrian Sample

Age	Abortion rate
15-19	2.5
20-24	4.9
25-29	9.2
30-34	4.0
35-39	3.0
40-44	5.9
45-49	0.0
Total	0.15

Table 12.6 Total abortion rates by education

Total abortion rates for the 5 year period preceding the survey by educational level, Turkey DHS 2018 – Syrian Sample

Education	TAR
No education	0.16
Primary	0.14
Secondary	0.16
More than secondary	0.14
Total	0.15

EARLY CHILDHOOD DEVELOPMENT 13

Key Findings

- ***Early childhood learning:*** 25% of children aged 24-59 months engaged with adult household members in 4 or more activities that promote learning and school readiness during the 3 days before the survey.
- ***Learning materials***: 2% of children under age 5 have 3 or more children's or picture books present in the household.
- ***Child care arrangements:*** 5% of children under age 5 were left alone or left in the care of another child younger than age 10 for more than 1 hour during the week preceding the survey.

Information obtained in the 2018 TDHS Syrian Migrant Sample allows for an assessment of several key aspects of the welfare of the children in this population. Questions were included on birth registration and living arrangements and the survival status of parents. A child's access to education is critical, and the household questionnaire also obtained information on children's participation in primary and secondary school. These data were discussed in Chapter 2 of this report.

This chapter presents data on early childhood education and development collected in the 2018 TDHS Syrian Sample using modules developed for UNICEF's Multiple Indicator Cluster Surveys. The early childhood development module was administered for all children of all interviewed women who were born after 2013.

These data are expected to help the Government of Turkey, international organizations, civil society, and other stakeholders design and implement programs and policies that will enhance opportunities for young children to reach their full potential by supporting families and communities and increasing access to quality early childhood care and education.

13.1 CHILDHOOD LEARNING

It is recognized that a period of rapid brain development occurs in the first years of life and that quality of home care is the major determinant of a child's development during this period. In this context, adults spending "quality time" with children, the presence of children's books in the home, opportunities for play to stimulate the imagination, and conditions of care are all important indicators of quality of home care. In the 2018 TDHS, questions in all of these areas were included in the Woman's Questionnaire; where mothers were either asked about all their children under age 5 or aged 24-59 months, depending on question. The information gathered is useful in assessing the extent to which the home care received by children of Syrian refugees in Turkey is supportive of early childhood development.

13.1.1 Support for Learning

Support for early learning

Percentage of children with whom any adult household member (age 15+) has (within the previous 3 days) engaged in four or more of the following activities to promote learning and school readiness: reading books or looking at picture books; telling stories; singing songs; taking children outside the home, playing with children; and spending time with children naming, counting, or drawing things

Sample: Children age 24-59 months born to interviewed women

Father's and mother's support for early learning

Percentage of children with whom the father or mother has engaged in four or more activities to promote learning and school readiness in the 3 days before the survey

Sample: Children age 24-59 months born to interviewed women

Twenty-five percent of Syrian migrant children age 24-59 months were engaged by adult household members in four or more activities that promote learning and school readiness during the 3 days before the survey. The mean number of activities in which adult household members engaged with the children was 2.1. Focusing on parental involvement, only 3% of children had engaged in 4 or more early learning activities with their fathers in the 3 days before the survey, while 16% had engaged in at least 4 activities with their mothers (**Table 13.1**).

Patterns by background characteristics

- Children whose mothers have no education or not completed primary school have the lowest levels of engagement in four or more activities with adult household members than children whose mothers have completed high school or higher education (10% versus 56%).

13.1.2 Children's Books and Playthings

Availability of books

Proportion of children who have three or more children's books or picture books

Availability of playthings

Proportion of children who play with two or more types of playthings (homemade toys, manufactured toys, and/or household or natural objects) when they are at home.

Sample: Children under 5 years of age born to interviewed women

Exposure to books in the early years not only provides children with a greater understanding of the nature of print but may also give them opportunities to see others reading (e.g., older siblings doing school work). The presence of books is also important for later school performance. Mothers were asked about the number of children's books or picture books they have for all their children under age 5. The results show that 2% of Syrian children under age 5 have 3 or more children's books or picture books (**Table 13.2**).

By stimulating the imagination, play also contributes to brain development. Mothers were asked what items children play with, including homemade toys, toys purchased from a shop, and other household objects or objects

found around the home. Forty-eight percent of the children under age 5 living with their mother play with homemade toys (including dolls and cars). Overall, 57% of children play with 2 or more types of playthings, including homemade toys, toys purchased from a store, and household objects (such as pots and bowls) along with objects found outside (such as sticks, rocks, animal shells, and leaves) (**Table 13.2**).

Patterns by background characteristics

- The percentage of children with 3 or more children's books is slightly higher in non-camp areas (2%) than camp areas (0.4%) (**Table 13.2**).
- The percentage of children who play with 2 or more types of playthings increases with mother's education level. Forty-nine percent of children with mothers who have no education or have not completed primary school have 2 or more types of playthings, as compared with 70% of children with mothers who have high school or higher education.

13.2 Adequate Care For Young Children

Leaving children alone or only in the presence of other young children is known to increase the risk of accidents, abuse, and neglect. In the 2018 TDHS, mothers interviewed in Syrian households were asked questions to establish whether their youngest child under age 5 had been left alone during the week preceding the interview for 1 hour or more and whether the child had been left in the care of another child under age 10 for 1 hour or more.

Inadequate care

Percentage of children under age 5 left alone or in the care of another child younger than age 10 for more than 1 hour at least once in the last week

Sample: Children under 5 years of age born to interviewed women

Four percent of the children under age 5 were left alone and 2% were left in the care of another child younger than age 10 for more than 1 hour during the week before the survey. Overall, 5% of children were left alone or left in the care of another child younger than age 10 for more than 1 hour at least once during the week before the survey (**Table 13.3**).

Patterns by background characteristics

- Children living in camp areas were more often left with inadequate care than children outside camp areas (8% and 5%, respectively).
- The proportion of children left with inadequate care is higher among children of mothers with no education or who have not completed primary school (7%) than mothers with high school or higher level of education (5%).

13.3 Developmentally On Track

Early child development index

Proportion of children who are developmentally on track in at least three of the following four domains: literacy-numeracy, physical, social-emotional, and learning

Sample: Children age under 5 born to interviewed women

Early childhood development is multidimensional and involves an ordered progression of motor, cognitive, language, socio-emotional and regulatory skills and capacities across the first few years of life. Physical growth, literacy and numeracy skills, socio-emotional development and readiness to learn are vital domains of a child's overall development, which build the foundation for later life and set the trajectory for health, learning and well-being.

In the 2018 TDHS, a 10-item module was used to calculate the Early Child Development Index (ECDI). The index is based on selected milestones that children are expected to achieve by ages 3 and 4 (36-59 months). The 10 items are used to determine if children are developmentally on track in four domains. ECDI is then calculated as the percentage of children who are developmentally on track in at least three of these four domains.

The results show that 97% of children age 3-4 years are on track for their age in terms of physical development; 15% are on track in the literacy-numeracy domain, 81% are on track in the social-emotional domain, and 89% are on track in the learning domain. Seventy-five percent of children are on track in their development as measured in at least three of the four developmental domains (**Table 13.4**).

Patterns by background characteristics

- The proportion of girls who are developmentally on track as measured in at least three of the four developmental domains is higher than the corresponding proportion for boys (79% and 71%, respectively).
- Children in non-camp areas have a slightly higher level of being on track in their development than children in camp areas (75% versus 68%).
- The early child development index score increases with increasing mother's education, from 71% among children whose mothers have no education or primary completed to 84% among children whose mothers have completed high school or higher.
- In general, the largest differentials in the proportions of children developmentally on track by background characteristics are in the literacy-numeracy domain. For example, only 6% of children with mothers who have less than primary school education are on track in the literacy-numeracy domain, as compared with 35% of children with mothers with high school or higher education.

List of Tables

For more information on early childhood development, see the following tables:

- **Table 13.1 Support for learning**
- **Table 13.2 Learning materials**
- **Table 13.3 Inadequate supervision**
- **Table 13.4 Early child development index**

Table 13.1 Support for learning

Percentage of children age 2-4 years with whom adult household members engaged in activities that promote learning and school readiness during the last three days, and engagement in such activities by fathers and mothers, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Adult household members			Percentage of children living with their:		Father		Mother		
	Percentage of children with whom adult household members have engaged in four or more activities[1]	Mean number of activities with adult household members	Percentage of children with whom no adult household member have engaged in any activity	Father	Mother	Percentage of children with whom fathers have engaged in four or more activities[2]	Mean number of activities with fathers	Percentage of children with whom mothers have engaged in four or more activities[2]	Mean number of activities with mothers	Number of all children 36-59 months old
Sex										
Male	23.5	2.0	34.6	93.1	99.4	2.7	0.7	14.7	1.5	527
Female	26.9	2.2	32.7	91.7	99.6	3.8	0.7	17.0	1.7	510
Residence										
Non-camp	25.3	2.1	33.9	92.4	99.5	3.2	0.7	16.1	1.6	986
Camp	24.1	2.1	29.0	92.4	100.0	3.4	0.7	11.0	1.3	51
Mother's education										
No educ / prim. incomp.	10.4	1.2	49.3	92.7	99.5	1.6	0.5	5.5	0.9	192
Complete primary	20.8	1.8	38.7	90.9	99.4	2.0	0.6	11.4	1.3	505
Complete secondary	28.3	2.6	17.0	95.1	99.5	1.8	0.8	17.1	2.0	194
Complete high school / higher	55.6	3.5	17.9	93.7	100.0	11.3	1.2	43.1	3.0	146
Father's education										
No educ / prim. incomp.	11,4	1,4	44,4	100,0	100,0	0,7	0,5	5,7	1,0	167
Complete primary	22,8	1,9	36,5	100,0	100,0	2,2	0,6	14,2	1,5	440
Complete secondary	26,5	2,2	33,7	100,0	100,0	1,9	0,6	14,7	1,6	204
Complete high school / higher	49,2	3,4	12,5	100,0	100,0	12,5	1,4	35,5	2,8	141
Biological father not in the household	21.5	2.0	31.3	0.0	93.3	1.3	0.2	13.4	1.4	79
Missing	*	*	*	*	*	*	*	*	*	6
Total	25.2	2.1	33.7	92.4	99.5	3.2	0.7	15.8	1.6	1,037

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] MICS indicator TC.49a - Early stimulation and responsive care by any adult household member
[2] MICS Indicator TC.49b - Early stimulation and responsive care by father
[3] MICS Indicator TC.49c - Early stimulation and responsive care by mother

Table 13.2 Learning materials

Percentage of children under age 5 by the number of children's books present in the household, and by the type and number of playthings that child plays with, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Percentage of children living in households that have for the child:		Percentage of children who play with:				Number of children
	3 or more children's books[1]	10 or more children's books	Homemade toys	Toys from a shop/ manufactured toys	Household objects /objects found outside	Two or more types of playthings[2]	
Sex							
Male	1.5	0.1	47.7	64.9	48.5	55.8	986
Female	2.4	0.2	47.3	64.2	50.0	57.9	874
Residence							
Non-camp	2.0	0.2	47.3	64.3	49.1	56.5	1,779
Camp	0.4	0.0	52.6	69.8	51.7	62.9	82
Mother's education							
No educ / prim. incomp.	0.8	0.3	45.3	52.1	44.2	49.1	324
Complete primary	1.4	0.0	44.5	62.9	48.8	53.6	918
Complete secondary	1.5	0.0	49.2	71.5	50.3	61.9	358
Complete high school / higher	6.1	0.8	58.8	76.4	55.4	70.4	260
Total	1.9	0.2	47.5	64.6	49.2	56.8	1,861

[1] MICS indicator TC.50 - Availability of children's books
[2] MICS indicator TC.51 - Availability of playthings

Table 13.3 Inadequate supervision

Percentage of children under age 5 left alone or under the supervision of another child younger than 10 years of age for more than one hour at least once during the past week, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Percentage of children:			Number of children
	Left alone in the past week	Left under the supervision of another child younger than 10 years of age in the past week	Left with inadequate supervision in the past week[1]	
Sex				
Male	3.9	2.3	5.3	986
Female	3.7	2.5	5.2	874
Residence				
Non-camp	3.7	2.3	5.2	1,779
Camp	4.7	4.3	7.8	82
Mother's education				
No educ / prim. incomp.	3.9	5.5	6.5	324
Complete primary	3.3	1.6	4.5	918
Complete secondary	4.7	2.4	6.5	358
Complete high school / higher	3.9	1.3	4.9	260
Total	3.8	2.4	5.3	1,861

[1] MICS indicator TC.52 - Inadequate supervision

Table 13.4 Early child development index

Percentage of children age 3-4 years who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains, and the early child development index score, the past week, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Percentage of children age 3-4 years who are developmentally on track for indicated domains				Early child development index score[1]	Number of children age 3-4 years
	Literacy-numeracy	Physical	Social-Emotional	Learning		
Sex						
Male	12.4	97.7	78.2	86.6	70.6	342
Female	18.0	95.9	83.9	91.2	79.4	310
Residence						
Non-camp	15.2	96.7	81.0	88.9	75.2	616
Camp	11.9	99.0	80.2	87.1	68.3	35
Mother's education						
No educ / prim. incomp.	5.5	95.6	80.7	87.7	71.0	120
Complete primary	15.3	96.0	80.1	89.5	74.8	324
Complete secondary	9.2	98.2	82.1	85.1	72.0	118
Complete high school / higher	34.5	100.0	82.8	92.6	83.5	90
Total	15.0	96.9	80.9	88.8	74.8	652

[1] MICS indicator TC.53 - Early child development index (SDG 4.2.1)

WOMEN'S EMPOWERMENT 14

Key Findings

- ***Women's employment:*** Only 8% of currently married Syrian women age 15-49 were employed in the 12 months before the survey, while 89% of their husbands were employed.
- ***Asset ownership:*** 3% percent of Syrian women own a house alone and/or jointly with someone else, while 2% own land/estate/field alone and/or jointly with someone.
- ***Participation in decision making:*** 55% of currently married Syrian women participate either alone or jointly with their husbands in decisions regarding their own health and use of contraceptive method.
- ***Attitude towards wife beating:*** Overall, 7% of women agreed that physical violence was justified at least under one specific circumstance. Regarding specific situations, more women agree that physical violence is justified if a woman neglects the children or if a woman argues with her husband (4% and 3% respectively) and few women say that violence is justified if a wife burns the food (1%).
- ***Interspousal differences:*** The mean difference in age between currently married women and their spouses is 5.5 years. Overall, the mean difference in educational attainment between women and their spouses is 0.2 years.

This chapter explores Syrian migrant women's empowerment in terms of employment status relative to those of their husbands. In addition, the chapter looks at other aspects of Syrian women's empowerment including ownership of assets, women's participation in household decision making, women's attitudes towards wife beating, and differences in age and educational levels.

14.1 MARRIED WOMEN'S AND THEIR HUSBANDS' EMPLOYMENT

Employment

Respondents are considered to be employed if they have done any work other than their housework in the 12 months before the survey.

Sample: Currently married women age 15-49 and their husbands age 15-49.

A very small proportion of currently married Syrian women age 15-49 were employed (8%) in the 12 months before the survey, while 89% of their husbands were employed. Among currently married Syrian respondents

who are employed in the past 12 months, 97% of women and almost all men are paid, 3% of women and virtual no men are unpaid workers (**Table 14.1**).

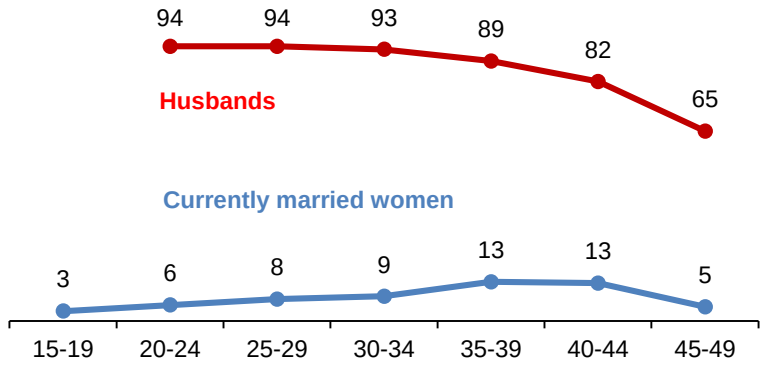
Table 14.2 presents the percent distribution of Syrian women who were not employed in the 12 months prior to the survey by the main reason that they did not work during the period. Forty-four percent of Syrian migrant women reported being a housewife, 22% reported caring for children, 14% reported that their husband or family would not allow them to work, and 6% reported being a student as the main reason for not working. Three percent of women reported that they are unemployed and looking for job.

Patterns by background characteristics

- Employment among currently married Syrian women increases with age, from 3% in the 15-19 age group to a peak of 13% in the 35-39 and 40-44 age groups. The percentage of Syrian women's husbands who are employed decreases from 94% among those age 20-24 and 25-29 to 65% among those age 45-49 (**Figure 14.1**).

***Figure 14.1* Employment by age**

Percentage of currently married Syrian women and their husbands who were employed at any time before the 12 months of the survey



- As expected, the proportion of Syrian migrant women who report their main reason for not working as being a housewife increases with increasing age (**Table 14.2**).
- Reasons for not working clearly differs with marital status; being a student and partner/family does not allow to work were the main reasons for not working among never married Syrian women (33% and 24%, respectively) whereas being a housewife and caring for children (50% and 27%, respectively) were the main reasons among currently married Syrian migrant women. It is worth mentioning that 12% of married Syrian women reported that their partner or family did not allow them to work.
- The proportion of Syrian women citing being a student as the reason for not working was higher among those living in camp than non-camp areas (10% and 65% respectively).
- The proportion of Syrian women citing their role as a housewife as the reason for not working decreases with increasing education (55% women with less than primary school education and 31% for women with high school or higher education).

14.2 Women's Ownership of Assets

Ownership of a house or land/estate/field

Respondents who own a house or land/estate/field, whether alone or jointly with someone else

Sample: Ever-married women age 15-49

Figure 14.2 shows that 97% of women age 15-49 do not own a house and that 98% do not own land/estate/field. Three percent of women own a house alone and/or jointly with someone else, while 2% own land/estate/field alone and/or jointly with someone.

***Figure 14.2* Ownership of Asset**

Percentage of ever married Syrian women age 15-49 by ownership of assets

Patterns by background characteristics

- Among Syrian migrant women age 15-49, both house and land/estate/field ownership rates generally low. Two percent of Syrian women age 25-29 own a house alone and/or jointly with someone else, as compared with 6% of Syrian women age 40-44. Similarly, 1% of Syrian women age 25-29 own land/estate/field alone and/or jointly with someone else, compared with 4% of Syrian women age 40-44 (**Table 14.3**).
- Both proportions of Syrian migrant women's house and land/estate/field ownership are higher in camp areas.
- As education level increases the proportion of Syrian migrant women's house ownership also increases, while only 2% of Syrian women with primary education own house in comparison to 4% of Syrian women with secondary education.

14.3 Women's Participation in Decision Making

Participation in major healthcare decisions

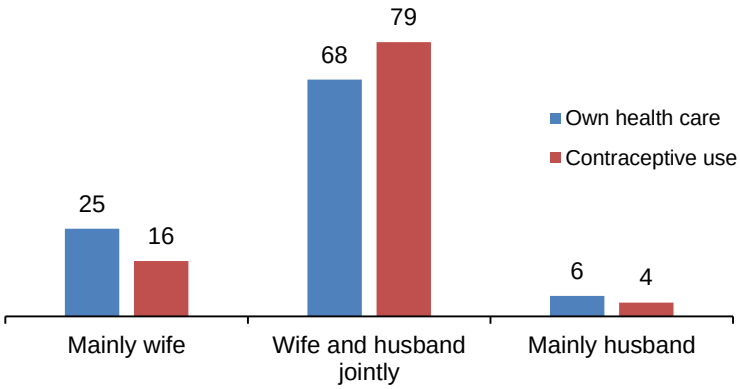
Women are considered to participate in household decisions if they make decisions alone or jointly with their husband in two of the following areas: (1) the woman's own health care and (2) contraceptive methods (both use and non-use)

Sample: Currently married women age 15-49

Table 14.4 shows the distribution of currently married Syrian migrant women age 15-49 by person who usually makes decisions about some issues in their own lives. Sixty-eight percent of women reported that they decide jointly with their husbands about their own health care, compared to 25% of Syrian women deciding by themselves.

Syrian women who use contraception were asked about who decides which method and for the non-users, who decides not to use contraception. Regarding use of contraception, the decision is most often taken jointly with the husband (79%) (**Figure 14.3**). Fifty-five percent of currently married Syrian women participate in both decisions, either alone or jointly with their husbands (**Table 14.5**). Only 3% of currently married Syrian women do not participate in any of the two decisions.

***Figure 14.3* Women's participation in decision making**
Percentage of currently married Syrian women age 15-49 by participating in decision making



Patterns by background characteristics

- Syrian women age 45-49 have the highest level of participation in making both decisions among all age groups (63%) (**Table 14.5**).
- Employed women have a slightly higher level of participation in both decisions (58%) than women who are not employed (55%) (**Table 14.5**).
- Fifty-seven percent of currently married Syrian women having 5 or more children report making both decisions either alone or jointly with their husband in comparison to 52% of Syrian women who have 1-2 children.
- The proportion of Syrian women's participation in both specified decisions is higher in non-camp areas than camp.

14.4 Attitudes toward Wife Beating

Attitudes toward wife beating

Respondents are asked if they agree that a husband is justified in hitting or beating his wife under each of the following five circumstances: she burns the food; she argues with him, she goes out without telling him; she neglects the children, and she refuses to have sex with him. If respondents answer 'yes' in at least one circumstance, they are considered to have attitudes justifying wife beating.

Sample: Women age 15-49

Domestic violence is a violation of women's human rights. Tolerance as well as the experience of domestic violence form significant barriers to women's empowerment and women's autonomy in all spheres of social life. This has adverse consequences for women's health, health-seeking behavior, and the health of their children. **Table 14.6** presents differences by background characteristics in the percentages of Syrian migrant women who agreed that wife beating would be justified in each of the five circumstances. Overall, 7% of Syrian women accepted at least one of the situations as a justification for physical violence. With regard to the specific situations, more Syrian migrant women agree that physical violence is justified if a woman neglects the children or if a woman argues with her husband (4% and 3%, respectively) and few Syrian women say that violence is justified if a wife burns the food (1%).

Patterns by background characteristics

- For Syrian migrant women age 45-49, “neglects the children” and “goes out without telling him” are the most cited reasons justifying violence (7% and 6% respectively).
- Thirteen percent of Syrian migrant women living in camp areas agree that physical violence is justified in at least one of the circumstances compared with 7% of those living outside camp areas.
- Acceptance of wife beating seems to be inversely associated with education level. While 11% of Syrian migrant women with no education or incomplete primary education think that physical violence would be justified in at least one of the circumstances specified, the proportion drops to 4% for Syrian women with high school or higher education.

14.5. Interspousal Differences in Age and Education

Age differences

Interspousal age differences are grouped as (1) wife older by 2+ years, (2) about the same age - one or two years difference, (3) husband older 2-4 years, (4) husband older 5-9 years and (5) husband older 10+ years.

***Sample*:** Currently married women age 15-49 and their husbands

Educational difference

Educational difference between women and their husband is grouped into three different categories: (1) husband better educated, (2) wife better educated and (3) both have equal education.

Sample: Currently married women age 15-49 and their husbands

Large differences in age and education levels between spouses may be associated with differences in relative power. **Table 14.7** presents data from the 2018 TDHS Syrian sample on differences in age and education levels between spouses. With regard to interspousal age differences, only 3% of Syrian migrant women are two or more years older than their husband. Fourteen percent of Syrian women are about the same age (less than two years older or younger than their spouse). Forty-three percent of currently married Syrian migrant women are married to men who are at least 5-9 years older than they are and, in the case of 15% of the Syrian women, the husband is 10 or more years older. The mean difference in age between currently married Syrian migrant women and their spouses is 5.5 years.

The results in **Table 14.8** show that husbands have attained, on average, equal educational levels with their wives. Forty percent of Syrian women are married to men who have more education than they have. Thirty-six percent of Syrian women is more educated than their spouses and 24% of Syrian women have same level of education with their husbands.

Patterns by background characteristics

- Considering the variation in interspousal ages across subgroups, the mean difference is greatest among young women, particularly among those under age 20 (6.5 years) and it is important to be aware of the age gap in planning programs to discourage early marriage among Syrian migrant women.
- With regards the variation in interspousal education differences, the gap tends to rise after age 20 for higher parities; 47% of Syrian women with at least five children are less educated than their spouse compared to 42% among women with no children.

- The interspousal gap in education is greatest among Syrian migrant women with the lowest level of education. Fifty-three percent of Syrian women who have never attended school or have not completed the primary level are married to men who better educated than themselves. On the other hand, 60% of Syrian women with high school or higher education have attained more years of schooling than their husbands.

LIST OF TABLES

For more information on women's empowerment, see the following tables:

Table 14.1 Employment and earnings of currently married women and their husbands

Percentage of currently married women age and husbands 15-49 who were employed at any time in the past 12 months and percent distribution of currently married women and their husbands employed in the past 12 months by type of earnings, according to age, Turkey DHS 2018 - Syrian Sample

CURRENTLY MARRIED WOMEN

	Among currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings			
Age of woman	Percentage employed in past 12 months	Number of respondents	Paid	Unpaid	Total	Number of women
15-19	3.4	216	*	*	*	7
20-24	5.5	404	*	*	*	22
25-29	7.5	361	(100.0)	(0.0)	(100.0)	27
30-34	8.5	275	(100.0)	(0.0)	(100.0)	24
35-39	13.4	216	(96.4)	(3.6)	(100.0)	29
40-44	13.0	154	*	*	*	20
45-49	4.9	107	*	*	*	5
Total	7.7	1,734	96.9	3.1	100.0	134

HUSBANDS

	Among husbands/ partners of currently married respondents:		Percent distribution of husbands/ partners employed in the past 12 months, by type of earnings			
	Percentage employed in past 12 months	Number of husbands/ partners	Paid	Unpaid	Total	Number of husbands/ partners
Age of husband						
15-19	*	12	*	*	*	12
20-24	94.3	228	100.0	0.0	100.0	215
25-29	94.4	326	99.7	0.3	100.0	308
30-34	93.4	383	100.0	0.0	100.0	357
35-39	88.6	282	100.0	0.0	100.0	250
40-44	81.9	196	100.0	0.0	100.0	161
45-49	65.4	151	100.0	0.0	100.0	99
Total	88.8	1,578	99.9	0.1	100.0	1,402

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parenthesis are based on 25-49 unweighted cases.

Table 14.2 Reason for not working

Percentage of reason not to work by background characteristics Turkey DHS 2018 - Syrian Sample

Background characteristic	Main reason for not currently working													Number of women
	Student	House-wife	Disabled/ Sick	Caring for elderly	Caring for children	Looking for a job/ Un-employed	Partner/ Family does not allow to work	Just migrated/ left	Does not need (want) to work	Pregnant/ just delivered a baby	Does not have a work permit	Does not speak the language	Other	
Age														
15-19	19.6	29.1	1.5	1.5	10.3	3.9	23.3	0.5	3.1	3.0	0.0	0.9	3.5	430
20-24	5.5	36.4	0.5	0.8	33.3	2.8	12.4	0.5	1.8	4.6	0.6	0.8	0.1	443
25-29	3.2	42.4	0.9	0.9	31.6	3.0	12.0	0.6	1.5	2.3	0.0	0.3	1.2	365
30-34	0.4	47.4	3.5	1.9	27.2	3.3	11.8	0.4	0.4	2.3	0.0	0.0	1.6	292
35-39	0.0	56.0	2.6	1.4	20.3	4.6	11.4	0.5	2.1	0.5	0.0	0.0	0.7	215
40-44	0.0	66.2	8.5	3.0	7.9	2.0	7.8	0.0	2.0	0.0	0.0	0.0	2.6	160
45-49	0.0	69.1	6.4	5.0	5.7	3.6	7.3	0.0	2.0	0.0	0.0	0.0	0.9	116
Employment (last 12 months)														
Not employed	6.4	43.8	2.0	1.4	22.8	2.4	14.7	0.5	2.0	2.0	0.1	0.4	1.5	1,818
Employed	3.5	24.6	6.9	3.0	8.9	27.8	0.0	0.0	3.0	14.8	0.0	0.0	7.5	36
Missing	2.2	49.0	6.1	3.4	19.1	8.0	7.3	0.0	0.0	4.4	0.0	0.0	0.6	169
Marital status														
Never married	32.5	12.6	6.2	5.0	0.0	7.4	24.2	0.8	4.1	0.0	0.8	1.6	4.7	305
Married or living together	1.2	49.6	1.5	0.9	26.6	2.1	12.1	0.4	1.6	2.9	0.0	0.2	0.9	1,623
Divorced/separated/ widowed	2.2	45.8	5.6	2.6	20.1	10.0	8.9	0.0	0.0	2.2	0.0	0.0	2.6	95
Number of living children														
0	21.3	25.3	4.9	3.1	0.0	6.9	23.1	1.1	3.6	4.7	0.5	1.6	3.8	497
1-2	1.6	42.7	0.5	0.8	36.0	2.4	11.1	0.3	1.1	2.9	0.0	0.0	0.6	625
3-4	1.1	49.8	1.5	0.7	28.3	2.8	11.9	0.2	1.3	1.1	0.0	0.0	1.3	501
5+	0.0	61.3	3.3	2.0	20.9	0.9	8.8	0.0	1.7	0.6	0.0	0.0	0.5	400
Residence														
Non-camp	5.9	43.9	2.4	1.6	22.3	3.3	13.7	0.5	1.9	2.5	0.1	0.4	1.5	1,939
Camp	9.5	42.7	1.7	1.7	21.3	4.3	14.7	0.0	1.3	0.8	0.0	0.0	2.1	84
Education														
No educ / prim. incomp.	0.0	54.5	4.9	3.8	18.3	2.4	11.4	0.0	0.6	1.8	0.3	0.7	1.3	375
Complete primary	1.0	46.1	2.3	1.5	22.2	2.8	17.3	0.2	2.1	2.4	0.1	0.3	1.7	969
Complete secondary	14.6	37.7	1.1	0.3	26.1	2.3	11.4	0.8	2.1	2.1	0.0	0.3	1.2	403
Complete high school / higher	19.1	30.6	1.4	0.8	22.1	7.9	7.9	1.2	2.4	3.9	0.0	0.8	1.9	277
Total	6.0	43.9	2.4	1.6	22.3	3.3	13.8	0.4	1.9	2.4	0.1	0.4	1.5	2,023

Table 14.3 Ownership of assets

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Percentage who own a house: Alone	Jointly	Percentage who do not own a house	Total	Percentage who own land/estate/field: Alone	Jointly	Percentage who do not own land/ estate	Total	Number of women
Age									
15-19	0.0	1.7	98.3	100.0	0.0	2.0	98.0	100.0	467
20-24	0.0	1.2	98.8	100.0	0.3	1.4	98.3	100.0	476
25-29	0.3	1.7	98.1	100.0	0.0	1.4	98.6	100.0	397
30-34	0.0	4.1	95.9	100.0	0.4	2.3	97.3	100.0	326
35-39	0.4	2.4	97.1	100.0	0.6	2.9	96.6	100.0	245
40-44	1.2	5.0	93.8	100.0	0.2	3.7	96.1	100.0	183
45-49	0.9	2.6	96.6	100.0	0.0	2.3	97.7	100.0	123
Residence									
Non-camp	0.2	2.2	97.5	100.0	0.2	2.0	97.8	100.0	2,126
Camp	0.0	5.1	94.9	100.0	0.8	3.9	95.3	100.0	90
Education									
No educ / prim. incomp.	0.0	1.7	98.3	100.0	0.0	1.6	98.4	100.0	426
Complete primary	0.1	2.2	97.7	100.0	0.0	1.8	98.2	100.0	1,047
Complete secondary	0.5	3.2	96.3	100.0	0.4	2.7	97.0	100.0	433
Complete high school / higher	0.7	2.6	96.7	100.0	0.7	2.8	96.4	100.0	311
Total	0.2	2.4	97.4	100.0	0.2	2.1	97.7	100.0	2,216

Table 14.4 Participation in decision making

Percent distribution of currently married women age 15-49 by person who usually makes decisions about various issues, Turkey DHS 2018 - Syrian Sample

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number of women
Own health care	25.3	68.3	5.9	0.4	0.0	100.0	1,734
Contraceptive use	16.0	79.1	4.0	0.3	0.7	100.0	1,734

Table 14.5 Women's participation in decision making on health

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Turkey DHS 2018 - Syrian Sample

Background characteristic	Specific decisions		Both decisions	None of the two decisions	Number of women
	Woman's own health care	Own contraception use			
Age					
15-19	90.7	51.7	46.8	4.4	216
20-24	92.9	54.4	51.5	4.3	404
25-29	93.5	58.0	53.9	2.4	361
30-34	95.8	59.4	56.9	1.8	275
35-39	93.0	61.2	57.6	3.4	216
40-44	95.2	63.6	61.6	2.7	154
45-49	97.1	63.6	62.7	2.0	107
Employment (last 12 months)					
Not employed	93.8	57.8	54.8	3.1	1,464
Employed	93.7	61.8	57.9	2.4	134
Missing	92.0	53.6	49.5	3.9	136
Number of living children					
0	93.5	55.8	53.5	4.2	184
1-2	93.1	55.2	51.9	3.6	630
3-4	93.7	60.7	56.3	1.8	517
5+	94.6	59.1	57.3	3.6	403
Residence					
Non-camp	93.5	58.0	54.7	3.2	1,667
Camp	96.9	53.4	52.4	2.1	67
Education					
No educ / prim. incomp.	92.3	57.7	55.1	5.1	331
Complete primary	94.0	60.2	57.1	2.9	838
Complete secondary	94.2	56.8	52.7	1.6	327
Complete high school / higher	93.8	50.9	47.8	3.1	238
Total	93.7	57.8	54.6	3.1	1,734

Table 14.6 Attitude toward wife beating

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Turkey DHS 2018 - Syrian Sample

	Husband is justified in hitting or beating his wife if she:						
Background characteristic	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Percentage who agree with at least one specified reason	Number
Age							
15-19	0.6	4.5	3.4	3.6	1.2	7.4	467
20-24	0.5	3.9	4.2	5.6	0.7	7.8	476
25-29	1.1	2.6	2.4	3.8	1.7	5.8	397
30-34	1.1	3.2	2.7	3.4	0.8	6.1	326
35-39	0.6	2.4	2.0	4.4	0.7	5.7	245
40-44	1.7	2.1	2.4	4.3	1.3	8.0	183
45-49	2.6	3.4	5.7	7.3	2.9	9.6	123
Employment (last 12 months)							
Not employed	1.0	3.3	3.4	4.2	1.2	7.0	1,818
Employed	0.9	4.9	2.3	4.3	0.9	7.0	229
Missing	0.8	2.2	2.2	6.3	0.8	6.9	169
Number of living children							
0	0.4	4.3	2.8	4.4	0.9	6.9	574
1-2	0.9	3.1	3.4	3.8	1.3	6.6	669
3-4	1.0	3.2	3.4	4.3	1.6	6.7	543
5+	1.6	2.7	3.3	5.5	0.9	8.0	430
Marital status							
Never married	0.3	4.8	2.6	4.6	1.0	7.6	369
Married or living together	1.1	3.2	3.4	4.5	1.3	7.0	1,734
Divorced/separated/widowed	0.0	1.9	1.9	2.8	0.0	5.6	113
Residence							
Non-camp	0.9	3.1	3.1	4.2	1.1	6.7	2,126
Camp	2.0	8.7	5.5	8.3	2.4	13.1	90
Education							
No educ / prim. incomp.	2.7	5.7	6.0	6.5	2.1	10.6	426
Complete primary	0.8	3.7	3.2	4.5	1.4	7.4	1,047
Complete secondary	0.2	2.0	2.3	3.5	0.5	4.8	433
Complete high school / higher	0.0	0.9	0.7	2.4	0.0	3.7	311
Total	0.9	3.4	3.2	4.4	1.2	7.0	2,216

Table 14.7 Interspousal age difference

Interspousal age difference by background characteristics Turkey DHS 2018 - Syrian Sample

Background characteristic	Interspousal age difference					Mean difference in age (husband-wife)	Number
	Wife older by 2+ years	About the same age	Husband older 2-4 years	Husband older 5-9 years	Husband older 10+ years		
Age							
15-19	0.0	4.9	26.3	51.8	17.1	6.5	216
20-24	1.6	13.6	27.6	43.4	13.9	5.4	404
25-29	2.2	13.8	24.7	44.3	14.9	5.5	361
30-34	3.8	18.5	24.5	41.1	12.0	5.0	275
35-39	4.4	16.8	27.1	35.1	16.6	5.4	216
40-44	4.6	13.2	23.7	41.8	16.7	5.9	154
45-49	5.9	18.1	17.4	34.7	23.9	5.6	107
Employment (last 12 months)							
Not employed	2.3	13.4	25.1	44.2	15.0	5.6	1,464
Employed	5.0	22.0	26.2	32.2	14.7	5.0	134
Missing	5.4	12.2	26.9	34.7	20.7	6.0	136
Number of living children							
0	4.8	16.9	26.7	35.3	16.4	5.3	184
1-2	3.2	14.6	28.1	38.9	15.2	5.3	630
3-4	1.5	12.7	25.2	46.1	14.4	5.7	517
5+	2.7	13.3	20.4	47.0	16.6	5.9	403
Residence							
Non-camp	2.8	14.0	25.3	42.7	15.2	5.5	1,667
Camp	2.1	13.6	25.7	37.7	20.9	6.1	67
Education							
No educ / prim. incomp.	5.8	17.9	23.5	40.7	12.1	5.0	331
Complete primary	1.9	14.6	23.8	42.2	17.4	5.8	838
Complete secondary	2.3	10.2	24.5	47.0	16.1	5.9	327
Complete high school / higher	2.2	11.5	34.2	40.1	11.9	5.2	238
Total	2.8	14.0	25.3	42.5	15.4	5.5	1,734

Table 14.8 Interspousal education difference

Interspousal education difference by background characteristics Turkey DHS 2018 - Syrian Sample

Background characteristic	Interspousal education differential				Number
	Husband better educated	Wife better educated	Both have equal education	Mean difference in education (husband-wife)	
Age					
15-19	48.0	32.1	19.9	0.9	216
20-24	39.4	42.1	18.5	(0.3)	404
25-29	35.5	41.5	22.8	(0.4)	361
30-34	39.3	36.8	23.9	0.1	275
35-39	39.9	24.1	36.0	0.7	216
40-44	41.6	32.9	25.6	0.8	154
45-49	46.5	31.2	22.3	1.1	107
Employment (last 12 months)					
Not employed	39.9	36.8	23.2	0.1	1,464
Employed	39.0	35.1	26.0	0.5	134
Missing	46.4	30.0	23.6	0.7	136
Number of living children					
0	41.9	42.5	15.5	0.3	184
1-2	40.0	37.0	22.8	0.0	630
3-4	35.3	40.8	23.9	(0.3)	517
5+	46.6	25.9	27.5	1.1	403
Residence					
Non-camp	40.1	36.5	23.3	0.2	1,667
Camp	46.6	26.7	26.7	0.6	67
Education					
No educ / prim. incomp.	52.6	29.5	18.0	0.9	331
Complete primary	45.2	27.1	27.6	0.9	838
Complete secondary	29.9	49.0	21.1	(0.4)	327
Complete high school / higher	20.4	59.7	19.9	(2.4)	238
Total	40.3	36.2	23.5	0.2	1,734

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SAMPLE DESIGN

Appendix A

A.1 INTRODUCTION

This section will include a description of the objectives of the survey, the overall sample size and survey domains for the Syrian sample of the 2018 Turkey Demographic and Survey (2018 TDHS). The 2018 TDHS is the sixth survey of its kind, following those implemented in 1993, 1998, 2003, 2008, and 2013. 2018 TDHS is the first in terms of including a separate sample of Syrians in Turkey in addition to national sample. The major objective of the design of the 2018 TDHS Syrian sample was to provide the important demographic characteristics and the health indicators for Syrians living in Turkey.

The survey involved a nationally representative sample consisting of target sample size of 2,000 Syrian households in Turkey. The Syrian sample of the 2018 TDHS was drawn with a different methodology than the national sample, because the sampling frame used is entirely different, and information on this population is limited.

Just like the national sample, an adult member (age 15 or older) in every household was interviewed in order to collect information on household members. In all of the households selected for the 2018 TDHS Syrian sample, all women age 15-49 who were usual members of the selected households or visitors who were present in the household on the night before the interview were identified as eligible and interviewed.

A.2 SAMPLE FRAME

The definition of "Syrian" was not limited to a particular legal status in 2018 TDHS. The population figures which were used as the first stage sampling frame were based on "Syrians under temporary protection status", which included Syrian nationals and stateless persons. However, the lists for the second stage were formed by field teams in the field, with a household screening question that asked "if there were any Syrians in the household". This was an attempt to keep the definition broader and ensuring all Syrian persons were included regardless of legal status.

The data on Syrian population in Turkey is kept by the Ministry of Interior, General Directorate of Migration Management. Due to issues of privacy, the individual addresses of Syrians in Turkey could not be used for sampling purposes. In the lack of a frame consisting of each Syrian household in Turkey, a sample was designed based on the population sizes of each quarter, which is the smallest administrative unit in Turkey. These population figures were provided by the Directorate on October 23, 2018.

The first step in preparing the first stage sampling frame was to exclude the population whose quarters/districts/provinces were not shown in the data provided. Out of 3,578,820 person registered, 2,077,346 had the province, district and quarter information available, leaving out 1,501,474 people. At this stage, quarters which corresponded to camps were identified and separated as a second stratum. As second and third steps, for non-camp areas, measures were taken to ensure the Syrian population in a quarter would be a) large enough to make up a cluster of 20 households, b) and dense enough so that field teams would run into 5 Syrian households per 100 households registered in the Address Based Population Registration System (ABPRS), making it feasible logistically to identify Syrian households. Thus some cut-offs were defined: all quarters that included less than 500 Syrian persons were excluded from the original frame, and the ratio of the Syrian population in each quarter to the total population in each corresponding quarter as given by the ABPRS were calculated; all quarters where this ratio was smaller than 5% were excluded. These criteria reduced the

number of persons on the frame to 1,110,339. The percentage distribution of the persons in this frame by province generally resembles the original distribution by province. Once the quarters fitting the above criteria were identified with corresponding populations of Syrians, quarters were selected systematically with PPS.

The above steps did not apply to selections for camps. Once camps were identified from the general frame as mentioned above, they were put aside as a separate stratum, with a size of 176,563 persons. At the selection stage, each camp was selected with PPS, using systematic selection.

After these, the frame had 759 quarters and 13 camps which include Syrian households in Turkey. **Table A.1** gives the distribution of quarters and camps that include Syrian households in Turkey by province.

A.3 SAMPLE DESIGN AND IMPLEMENTATION

A multistage, stratified cluster sampling approach was used for the Syrian sample of the 2018 TDHS, however, these features are different than that of the national sample.

Stratification in 2018 TDHS Syrian sample was based on only one variable, which was an indicator variable for camp/non-camp population. After cut-offs were applied and certain quarters were left out, the remaining quarters were grouped into camp and non-camp strata.

First stage sample selection included the selection of quarters as primary sampling units from each strata as explained earlier. Systematic selection was used for selecting the quarters; where quarters were given selection probabilities proportional to their sizes. The systematic selection was made from a list ordered by province. For the camp population, some quarters (camps) were selected more than once when the selection interval was smaller than the camp size (where these camps were self-representing PSUs).

The second stage of sample selection was carried out after block lists were created by field teams in the field, where teams identified Syrian households in selected quarters. Field teams to conduct interviews in the Syrian fieldwork had extra staff with them to carry on listing prior to interviews. Each team was asked to screen households until they could list 40 Syrian households in the quarters they visited, and 20 of these were selected for interviews. The proportion of the listed households compared to the total Syrian households (estimated based on the registered Syrian population) in each cluster was calculated and was used in the sampling weight calculation as a segmentation factor.

In the **listing** fieldwork, each interview team was provided with support staff, who spoke Arabic, and received training at the Institute of Population Studies for in-the-field listing. At each quarter, teams visited local contact units (mukhtars – administrator of quarter, health centers, NGO offices, etc.) and got basic information on which streets Syrians household mostly reside in the quarter. After this initial briefing, teams started household screening, asking “Are there any Syrian persons residing in this household?” at each address, and listed a total of 40 occupied households with “at least one Syrian” resident. Syrian persons were defined and introduced as any persons who identify as Syrians, regardless of their legal status or them being a member of the family, etc., so that no households would be missed. The reason of listing 40 households was to reduce the listing work burden due to large quarters and spare Syrian households, and also to provide some heterogeneity within the selected quarter compared to listing 20 households in a compact manner. In cluster numbers that were odd, teams would interview households that received odd list numbers, and it would be vice versa for even cluster numbers. No maps were drawn in this listing procedure, because the listing staff and interviewers were already together in the field, and interviews started taking place soon after listing started.

The pilot fieldwork for the Syrian sample listing procedure was done by project staff in Ankara in September 2018, and project staff who participated in this pilot initially accompanied the Syrian sample field teams and

trained them on listing in the field. Because the listing fieldwork for the Syrian sample was simultaneous with the Syrian sample fieldwork, they both finished at the same time, in January 2019. In one camp in Adana, permissions were not granted by the Governorate, resulting in two unvisited and one unfinished cluster.

The target sample size of the 2018 TDHS Syrian sample was set at 2,000 households to be interviewed in 100 clusters. This sample size was determined to ensure an acceptable level of precision for core indicators that could be compared to those obtained from the national sample. Fifteen of the clusters were selected from the camps, and 85 were selected outside camps, from quarters. In the 2018 TDHS Syrian sample, 20 households were selected in each listed block. On this basis, the achieved allocation of sample households and the total number of selected clusters by provinces is shown in **Table A.2.**

A.4 SAMPLE PROBABILITIES AND SAMPLING WEIGHTS

The 2018 TDHS Syrian sample is not self-weighted. Allocation was not made proportionately between camp and non-camp areas; since there would have been inadequate number of observations for inference from camp areas otherwise. Due to the disproportionate allocation of the sample across camp and non-camp areas and the differential response rates in terms of these areas and ever-married and never married women, sampling weights must be used in all analyses of the 2018 TDHS Syrian sample to ensure that survey results are representative. Although separate weights were calculated for each of the 100 clusters, weights are almost the same within strata because of no complete household listing: 40 households were listed and 20 households were selected for each cluster (except for several clusters where 41 or 42 households were listed).

There are two main components to the sampling weights in DHS surveys: One resulting from the probability of selection, and one from non-response. The first component is required because the design is not an equal probability selection method; different units are selected with different probabilities. Weights are used to allow the units to represent their share of the population.

The idea behind the non-response correction is similar: If non-response is higher in some domains than others, then they will be under-estimated when speaking about the population. Thus units are multiplied by the inverse of the non-response rates in their domains.

Since the 2018 TDHS Syrian sample is a two-stage stratified cluster sample, sampling weights are based on sampling probabilities calculated separately for each sampling stage and for each cluster where:

P_{1hi}: first-stage sampling probability of the i^{th} cluster in stratum h

P_{2hi}: second-stage sampling probability within the i^{th} cluster (households)

For correcting the distribution of camp and non-camp areas in the sample according to the population distribution, the denominator of the first stage selection probability for non-camp areas was taken as the population figure before the frame was narrowed down for first stage sample selection, i.e. it included all non-camp Syrian population. Therefore, while the denominator for the first stage was 176,563 for camps as in Table A.1, it was 3,402,257 rather than 1,110,339 for non-camp areas. The assumption here was that Syrians within and outside the final sampling frame were not different in terms of survey variables.

The following describes the calculation of these probabilities further:

Let a_h be the number of clusters selected in stratum h, M_{hi} the number of Syrian persons under temporary protection according to the sampling frame in the i^{th} cluster, and $\sum M_{hi}$ the total number of Syrian persons in the stratum. The probability of selecting the i^{th} cluster in stratum h in the 2018 TDHS Syrian sample is calculated as follows:

$$\frac{a_h\ M_{hi}}{\sum M_{hi}}$$

Let b_{hi} be the proportion of households listed (40 households) in the selected cluster (quarter) compared to the total number of Syrian households in cluster *i* in stratum *h* (the segmentation factor mentioned above), then the overall probability of selecting cluster *i* in the sample is:

$$P_{1hi} = \frac{a_h\ M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let L_{hi} be the number of households (40 households) listed in the household listing operation in cluster *i* in stratum *h*, and let g_{hi} be the number of households selected in the cluster (20 households). The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster *i* of stratum *h* in the 2018 TDHS Syrian sample is therefore the product of the two stages' selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The design weight for each household in cluster *i* of stratum *h* is the inverse of its overall selection probability:

$$W_{hi} = 1/P_{hi}$$

Design weights are calculated first, for households and for women. The design weight is the inverse of the overall probability of selection of the unit (it is the same for households and women as no selection is made within households regarding women. All eligible women are interviewed with a probability of selection of 1).

A spreadsheet containing all sampling parameters and selection probabilities was prepared to facilitate the calculation of the design weights.

The second component taken into account in the calculation of the weights is the level of non-response for the household and the individual interviews. Non-response is adjusted at the stratum level; and for ever-married and never-married women separately. According to the DHS Sampling and Listing Manual prepared by The DHS Program, response rates used in the calculation of sample weights are also weighted by the design weight. The adjustment for household non-response is equal to the inverse value of:

$$R_{hh} = \frac{\sum W_{hi} \times m^*_{hi}}{\sum W_{hi} \times m_{hi}}$$

Where m^*_{hi} is the number of households in cluster where interviews were possible, and m_{hi} denotes the total number of eligible households in the cluster.

Eligible households include households where interviews were completed, households where there were no competent respondents, households where interviews were postponed and eventually not completed, refusals, and those dwellings that were not found by the fieldwork teams.

Similarly, individual level response rate by marital status for stratum *h* is calculated as:

$$R_h^{EM} = \frac{\sum W_{hi} \times k_{hi}^{EM*}}{\sum W_{hi} \times k_{hi}^{EM}}$$

$$R_h^{NM} = \frac{\sum W_{hi} \times k_{hi}^{NM*}}{\sum W_{hi} \times k_{hi}^{NM}}$$

Where k_{hi}^{EM*} is the number of interviewed ever-married women in cluster, and k_{hi}^{EM} denotes the total number of ever-married women in the cluster (NM stands for never-married women). The non-response adjustment was made for ever-married and never married women separately within each strata. The reason for this was the significantly higher level of non-response among never-married women. Ignoring this difference between women of different marital status would lead to an under-representation of never married women in the sample.

The weights for the 2018 TDHS Syrian sample also include an adjustment for missing clusters. The household survey weight was computed as follows:

$$D_{hi} = \frac{W_{hi}}{(R_{ch} \times R_{hh})}$$

And the sampling weights for ever-married and never-married women were calculated by dividing the design weight by the non-response component for each group:

$$W_{hi}^{EM} = \frac{W_{hi}}{(R_{ch} \times R_{hh} \times R_h^{EM})}$$

$$W_{hi}^{NM} = \frac{W_{hi}}{(R_{ch} \times R_{hh} \times R_h^{NM})}$$

Where R_{ch} is the cluster level response rate in stratum h.

After the survey weights for the households (D_{hi}) were calculated by multiplying their design weights by the non response correction factors for each stratum; they were normalized by multiplying these weights by the ratio of the number of completed interviewed households to the total unadjusted weighted number of households. The normalization process is done to obtain a total number of unweighted cases equal to the number of weighted cases for the total number of completed interviews.

The final household weight is $HV005_{hi} = D_{hi} \times \frac{\sum\sum m_{hi}^*}{\sum\sum D_{hi} \times m_{hi}^*}$

The weighted distribution of household members by province closely resembles the distribution of the Syrian population by province in the first stage sampling frame used.

A similar normalization procedure was followed in obtaining the final weights for the individual women's data. However, it was not done separately for the two marital status groups, because the normalized weights are relative weights, separately normalized weights would not allow to calculate any women indicators for the two marital status together. Therefore, a combined normalization factor (*FW*) was computed, that would preserve the marital distribution in the population, rather than that of the sample:

$$FW = \frac{\sum\sum(k_{hi}^{EM*} + k_{hi}^{NM*})}{\sum\sum W_{hi}^{EM} \times k_{hi}^{EM*} + \sum\sum W_{hi}^{NM} \times k_{hi}^{NM*}}$$

And the weight for women is $V005_{hi} = \begin{cases} W_{hi}^{EM} \times FW \; if \; ever \; married \\ W_{hi}^{NM} \times FW \; if \; never \; married \end{cases}$

The normalized weights are relative weights that are valid for estimating means, proportions, ratios, and rates, but they are not valid for estimating population totals or for pooled data.

A.5 Sample Implementation Results

Table A.3 presents response rates, for Syrian households and women in Turkey by residence (camps and non-camps). The results indicate that, of the 1960[1] households selected, the TDHS fieldwork teams successfully completed interviews with 1,826 (93%). The main reasons that eligible households were not interviewed were that there is no competent respondent at home to answer the household questionnaire (3%), and refusals (2%). A total of 1,932 Syrian households were located and visited, of which 1,826 households were successfully interviewed. Overall, the household response rate was calculated as 95%.

The household response rate was almost same in camp and non-camp areas (95%and 94%, respectively).

In the interviewed households, 2,391 eligible women were identified, of whom 93%were interviewed. Among the number of eligible women not interviewed in the survey, the principal reason for non-response was the failure to find the woman at home after repeated visits to the households (5%).

The overall response rate in the 2018 TDHS Syrian sample was calculated as 88%. The eligible women response rate was found as 92 %in non-camps and 95 %in camps.

List of Tables

For more information on sample design and implementation, see the following tables:

- **Table A.1 Distribution of quarters and camps that include Syrian households by provinces in the frame**
- **Table A.2 Achieved sample distribution of clusters by province**
- **Table A.3 Sample implementation according to residence**

[1] Although the target sample size was initially 2,000 households, 1,960 households were determined as eligible during the fieldwork. The difference is due to two missing clusters with 40 households excluded.

Table A.1 Distribution of quarters and camps that include Syrian households by provinces in the frame

The distribution of the number of quarters in the frame that each have more than 500 Syrian persons under temporary protection and where the ratio of these persons to ABPRS population is higher than 5%, Turkey DHS 2018 - Syrian Sample

	Quarters/Camps		Syrian population	
Province	Number	Percentage	Size	Percentage
Non-camp frame				
Adana	65	8.6	99,121	8.9
Adıyaman	3	0.4	2,297	0.2
Ankara	19	2.5	28,381	2.6
Batman	1	0.1	845	0.1
Bursa	2	0.3	1,139	0.1
Denizli	1	0.1	1,321	0.1
Diyarbakır	3	0.4	4,004	0.4
Elazığ	2	0.3	2,769	0.2
Gaziantep	142	18.7	210,975	19.0
Hatay	102	13.4	171,898	15.5
İstanbul	106	14.0	221,380	19.9
İzmir	31	4.1	29,533	2.7
Kahramanmaraş	31	4.1	32,925	3.0
Kayseri	19	2.5	27,820	2.5
Kilis	36	4.7	36,758	3.3
Kocaeli	13	1.7	10,993	1.0
Konya	28	3.7	30,300	2.7
Malatya	1	0.1	959	0.1
Manisa	1	0.1	881	0.1
Mardin	14	1.8	14,595	1.3
Mersin	76	10.0	106,575	9.6
Muğla	1	0.1	507	0.0
Osmaniye	17	2.2	19,893	1.8
Şanlıurfa	45	5.9	54,470	4.9
Total	759	100.0	1,110,339	100.0
Camp frame				
Adana	1	(7.7)	30,711	17.4
Gaziantep	1	(7.7)	10,124	5.7
Hatay	3	(23.1)	18,593	10.5
Kahramanmaraş	1	(7.7)	17,197	9.7
Kilis	2	(15.4)	36,217	20.5
Malatya	1	(7.7)	3,191	1.8
Osmaniye	1	(7.7)	14,552	8.2
Şanlıurfa	3	(23.1)	45,978	26.0
Total	13	100.0	176,563	100.0

Table A.2 Achieved sample distribution of clusters by province

The distribution of the number of clusters and households selected in each province by camp and non-camp areas without an explicit stratification by province, Turkey DHS 2018 - Syrian Sample

Province	Number of clusters selected	Number of households selected
Non-camp sample		
Adana	7	140
Adıyaman	1	20
Ankara	2	40
Gaziantep	17	340
Hatay	13	260
Mersin	8	160
İstanbul	17	340
İzmir	2	40
Kayseri	2	40
Kocaeli	1	20
Konya	2	40
Malatya	1	20
Kahramanmaraş	2	40
Mardin	1	20
Şanlıurfa	4	80
Kilis	3	60
Osmaniye	2	40
Non-camp sample total	85	1700
Camp sample		
Adana	3	60
Gaziantep	1	20
Hatay	1	20
Kahramanmaraş	2	40
Kilis	3	60
Osmaniye	2	40
Şanlıurfa	3	60
Camp sample total	15	300
Total	100	2,000

Table A.3 Sample implementation according to residence

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall women response rates, according to camp and non-camp strata (unweighted), Turkey DHS 2018

Result	Residence		Total
	Non-camp	Camp	
Selected households			
Completed (C)	93.7	89.6	93.2
Household present but no competent respondent at home (HP)	3.0	3.5	3.1
Postponed (P)	0.3	0.0	0.3
Refused (R)	2.2	1.2	2.1
Household absent (HA)	0.2	0.8	0.3
Other (O)	0.6	5.0	1.2
Total	100.0	100.0	100.0
Number of sampled households	1,700	260	1,960
Household response rate (HRR)[1]	94.4	95.1	94.5
Eligible women			
Completed (EWC)	92.4	95.1	92.7
Not at home (EWNH)	5.2	3.0	4.9
Postponed (EWP)	0.3	0.0	0.3
Refused (EWR)	0.7	0.4	0.6
Partly completed (EWPC)	0.1	0.4	0.2
Other (EWO)	1.4	1.1	1.3
Total	100.0	100.0	100.0
Number of women	2,125	266	2,391
Eligible women response rate (EWRR)[2]	92.4	95.1	92.7
Overall women response rate (ORR)[3]	87.2	90.5	87.6

Note: The household response rate is calculated for completed households as a proportion of completed, no competent respondent, postponed, refused, dwelling not found (DNF) and partly completed (PC). Since listing was done simultaneously with the field study for the 2018 TDHS Syrian sample, the dwelling not found result code was not applicable.

[1] Using the number of households falling into specific response categories, the household response rate (HRR) for the 2018 TDHS Syrian fieldwork is calculated as:

$$\frac{C}{C + HP + P + R + DNF + PC}$$

[2] The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC).

[3] The overall response rate (ORR) is calculated as:

$$ORR = HRR * EWR$$

ESTIMATES OF SAMPLING ERRORS

Appendix B

The estimates from a sample survey are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data procesing errors. Although numerous efforts were made during the implementation of the 2018 Turkey Demographic and Health Survey (2018 TDHS) Syrian sample to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2018 TDHS Syrian sample is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95% of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2018 TDHS Syrian sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. Sampling errors are computed by SAS programs developed by ICF. These programs use the Taylor linearization method to estimate variances for survey estimates that are means, proportions, or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } z_h = y_h - rx_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of clusters selected in the h^{th} stratum,
y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum,
x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum, and
f is the overall sampling fraction, which is so small that it is ignored.

The stratum variable used in the calculation of the standard errors of selected indicators in 2018 TDHS Syrian sample is the variable V023, which denotes design strata (camp and non-camp strata).

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulas. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2018 TDHS Syrian sample, there were 98 non-empty clusters. Hence, 98 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 98 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 97 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2018 TDHS Syrian sample are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, as well as for camp and non-camp areas. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 through B.4 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95% confidence limits (R±2SE), for each variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for *children ever born to women age 40-49*) can be interpreted as follows: the overall average number of children ever born to Syrian women age 40-49 in Turkey is 5.495 and its standard error is 0.172. Therefore, to obtain the 95% confidence limits, one adds and subtracts twice (approximate t-table value for 95% confidence level) the standard error to the sample estimate, i.e., $5.495 \pm 2 \times 0.172$. There is a high probability (95%) that the *true* average number of children ever born to all women age 40 to 49 is between 5.150 and 5.840.

For the total sample, the value of the DEFT, averaged over all variables in Table C.1, is 1.18. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.18 over that in an equivalent simple random sample.

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For more information on sampling errors, see the following tables:

- **Table B.1 List of indicators for sampling errors, Turkey DHS 2018 - Syrian sample**
- **Table B.2 Sampling errors, Turkey DHS 2018 - Syrian sample**
- **Table B.3 Sampling errors, Non-camp areas, Turkey DHS 2018 - Syrian sample**
- **Table B.4 Sampling errors, Camps, Turkey DHS 2018 - Syrian sample**

Table B.1 List of indicators for sampling errors, Turkey DHS 2018 - Syrian sample

Variable	Estimate	Base Population
Non-camp areas	Proportion	All women 15-49
Literate	Proportion	All women 15-49
No education/primary school incomplete	Proportion	All women 15-49
Secondary school or higher	Proportion	All women 15-49
Never married	Proportion	All women 15-49
Currently married/in union	Proportion	All women 15-49
Married before age 20	Proportion	All women 20-49
Currently pregnant	Proportion	All women 15-49
Children ever born	Mean	All women 15-49
Children ever born to women over 40	Mean	All women 40-49
Children surviving	Mean	All women 15-49
Knowing any contraceptive method	Proportion	Currently married women 15-49
Knowing any modern contraceptive method	Proportion	Currently married women 15-49
Ever used any contraceptive method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using IUD	Proportion	Currently married women 15-49
Currently using male condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using female sterilization	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Currently using periodic abstinence	Proportion	Currently married women 15-49
Using public sector source	Proportion	Current users of modern methods
Want no more children	Proportion	Currently married women 15-49
Want to delay at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	All women 15-49 with numeric responses
Mothers received antenatal care for last birth	Proportion	Women with a birth in last five years
Tetanus injections at last ANC visit	Proportion	Women who received ANC for the last birth in last 5 years
Births with skilled attendant at delivery	Proportion	Births occurring 1-59 months before survey
Vaccination card seen	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received TDAP-IPV-HIB vacc. (3 doses)	Proportion	Children 12-23 months
Received Hepatitis B vaccination (3 doses)	Proportion	Children 12-23 months
Received 1st dose of polio vaccination	Proportion	Children 12-23 months
Received 2nd dose of polio vaccination	Proportion	Children 24-35 months
Received pneumoccocal vaccination (3 doses)	Proportion	Children 12-23 months
Received Hepatitis A vaccination (2 doses)	Proportion	Children 24-35 months
Received chickenpox/variacella vaccination	Proportion	Children 24-35 months
Received MMR vaccination	Proportion	Children 24-35 months
Received all basic vaccinations	Proportion	Children 24-35 months
Received all age appropriate vaccinations (12-23 months)	Proportion	Children 12-23 months
Received all age appropriate vaccinations (24-35 months)	Proportion	Children 24-35 months
Height-for-age (-2SD)	Proportion	Children under 5 who were measured
Weight-for-height (-2SD)	Proportion	Children under 5 who were measured
Height-for-age (-2SD)	Proportion	Children under 5 who were measured
Body Mass Index (BMI) <18.5	Proportion	All women 15-49 who were measured (except for those who are pregnant or gave birth in the past 2 months)
Body Mass Index (BMI) ≥ 25.0	Proportion	All women 15-49 who were measured (except for those who are pregnant or gave birth in the past 2 months)
Total fertility rate (3 years)	Rate	Women-years of exposure to childbearing
Neonatal mortality (last 0-4 years)	Rate	Children exposed to the risk of mortality
Post-neonatal mortality (last 0-4 years)	Rate	Children exposed to the risk of mortality
Infant mortality (last 0-4 years)	Rate	Children exposed to the risk of mortality
Child mortality (last 0-4 years)	Rate	Children exposed to the risk of mortality
Under-five mortality (last 0-4 years)	Rate	Children exposed to the risk of mortality

Table B.2 Sampling errors, Turkey DHS 2018 - Syrian sample

Variable	Value (R)	Standard Error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design Effect (DEFT)	Relative Error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
Non-camp areas	0.960	0.004	2216	2216	0.876	0.004	0.952	0.967
Literate	0.781	0.016	2216	2216	1.799	0.020	0.750	0.813
No education/primary school incomplete	0.192	0.015	2216	2216	1.735	0.076	0.163	0.221
Secondary school or higher	0.335	0.021	2216	2216	2.100	0.063	0.293	0.378
Never married	0.166	0.011	2216	2216	1.419	0.067	0.144	0.189
Currently married/in union	0.783	0.012	2216	2216	1.368	0.015	0.759	0.807
Married before age 20	0.592	0.016	1778	1749	1.333	0.026	0.561	0.623
Currently pregnant	0.136	0.008	2216	2216	1.121	0.060	0.120	0.152
Children ever born	2.666	0.061	2216	2216	1.147	0.023	2.544	2.788
Children ever born to women over 40	5.495	0.172	315	305	1.129	0.031	5.150	5.840
Children surviving	2.532	0.056	2216	2216	1.133	0.022	2.419	2.645
Knowing any contraceptive method	0.991	0.002	1770	1734	1.013	0.002	0.986	0.995
Knowing any modern contraceptive method	0.988	0.003	1770	1734	1.014	0.003	0.983	0.993
Ever used any contraceptive method	0.710	0.016	1770	1734	1.448	0.022	0.679	0.741
Currently using any method	0.431	0.015	1770	1734	1.289	0.035	0.401	0.461
Currently using a modern method	0.241	0.012	1770	1734	1.161	0.049	0.217	0.264
Currently using pill	0.063	0.007	1770	1734	1.199	0.110	0.049	0.077
Currently using IUD	0.131	0.009	1770	1734	1.123	0.069	0.113	0.149
Currently using male condoms	0.022	0.003	1770	1734	0.990	0.156	0.015	0.029
Currently using injectables	0.004	0.002	1770	1734	1.001	0.364	0.001	0.007
Currently using female sterilization	0.019	0.003	1770	1734	1.064	0.181	0.012	0.026
Currently using withdrawal	0.184	0.010	1770	1734	1.118	0.056	0.164	0.205
Currently using periodic abstinence	0.006	0.002	1770	1734	1.101	0.334	0.002	0.010
Using public sector source	0.390	0.026	427	421	1.116	0.068	0.337	0.442
Want no more children	0.431	0.014	1770	1734	1.180	0.032	0.403	0.459
Want to delay at least 2 years	0.247	0.012	1770	1734	1.208	0.050	0.222	0.271
Ideal number of children	3.947	0.063	2156	2153	1.349	0.016	3.822	4.073
Mothers received antenatal care for last birth	0.929	0.009	1224	1194	1.193	0.009	0.912	0.947
Tetanus injections at last ANC visit	0.300	0.018	1136	1110	1.310	0.059	0.265	0.336
Births with skilled attendant at delivery	0.975	0.005	1962	1903	1.307	0.006	0.964	0.986
Vaccination card seen	0.813	0.021	398	393	1.056	0.026	0.771	0.854
Received BCG vaccination	0.835	0.020	398	393	1.085	0.024	0.794	0.876
Received TDAP-IPV-HIB vacc. (3 doses)	0.687	0.027	398	393	1.154	0.039	0.634	0.741
Received Hepatitis B vaccination (3 doses)	0.740	0.029	398	393	1.298	0.039	0.683	0.798
Received 1st dose of polio vaccination	0.769	0.023	398	393	1.106	0.031	0.722	0.816
Received 2nd dose of polio vaccination	0.557	0.028	394	385	1.112	0.051	0.500	0.613
Received pneumoccocal vaccination (3 doses)	0.687	0.028	398	393	1.196	0.041	0.631	0.742
Received Hepatitis A vaccination (2 doses)	0.364	0.021	394	385	0.830	0.057	0.322	0.405
Received chickenpox/variacella vaccination	0.723	0.029	394	385	1.264	0.040	0.664	0.781
Received MMR vaccination	0.825	0.020	394	385	1.045	0.025	0.784	0.866
Received all basic vaccinations	0.636	0.027	394	385	1.118	0.043	0.582	0.691
Received all age appropriate vaccinations (12-23 months)	0.604	0.032	398	393	1.287	0.052	0.541	0.667
Received all age appropriate vaccinations (24-35 months)	0.284	0.021	394	385	0.921	0.075	0.242	0.326
Height-for-age (-2SD)	0.174	0.012	1694	1651	1.235	0.072	0.149	0.199
Weight-for-height (-2SD)	0.019	0.003	1759	1711	1.050	0.187	0.012	0.026
Weight-for-age (-2SD)	0.035	0.005	1707	1662	1.019	0.140	0.025	0.045
Body Mass Index (BMI) <18.5	0.030	0.005	1797	1800	1.234	0.166	0.020	0.040
Body Mass Index (BMI) ≥ 25.0	0.600	0.012	1797	1800	1.074	0.021	0.575	0.625
Total fertility rate (3 years)	5.302	0.190	6314	6293	1.331	0.036	4.922	5.683
Neonatal mortality (last 0-4 years)	12.041	2.692	1964	1902	0.997	0.224	6.658	17.424
Post-neonatal mortality (last 0-4 years)	9.970	2.239	1949	1889	0.967	0.225	5.491	14.449
Infant mortality (last 0-4 years)	22.011	3.579	1965	1903	1.028	0.163	14.852	29.169
Child mortality (last 0-4 years)	5.421	1.647	1796	1731	0.965	0.304	2.126	8.715
Under-five mortality (last 0-4 years)	27.312	3.804	1969	1907	1.006	0.139	19.705	34.919

Table B.3 Sampling errors, Non-camp areas, Turkey DHS 2018 - Syrian sample

Variable	Value (R)	Standard Error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design Effect (DEFT)	Relative Error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
Non-camp areas	1.000	0.000	1,963	2,126	.	0.000	1.000	1.000
Literate	0.779	0.016	1,963	2,126	1.749	0.021	0.746	0.812
No education/primary school incomplete	0.194	0.015	1,963	2,126	1.686	0.078	0.164	0.224
Secondary school or higher	0.335	0.022	1,963	2,126	2.052	0.065	0.291	0.379
Never married	0.165	0.012	1,963	2,126	1.383	0.070	0.142	0.188
Currently married/in union	0.784	0.012	1,963	2,126	1.330	0.016	0.759	0.809
Married before age 20	0.594	0.016	1,570	1,676	1.306	0.027	0.561	0.626
Currently pregnant	0.137	0.008	1,963	2,126	1.088	0.062	0.120	0.154
Children ever born	2.645	0.063	1,963	2,126	1.119	0.024	2.519	2.771
Children ever born to women over 40	5.539	0.179	274	291	1.104	0.032	5.181	5.897
Children surviving	2.511	0.058	1,963	2,126	1.104	0.023	2.395	2.627
Knowing any contraceptive method	0.990	0.002	1,579	1,667	0.975	0.002	0.986	0.995
Knowing any modern contraceptive method	0.987	0.003	1,579	1,667	0.976	0.003	0.982	0.993
Ever used any contraceptive method	0.709	0.016	1,579	1,667	1.412	0.023	0.676	0.741
Currently using any method	0.429	0.016	1,579	1,667	1.256	0.036	0.398	0.460
Currently using a modern method	0.241	0.012	1,579	1,667	1.135	0.051	0.217	0.266
Currently using pill	0.063	0.007	1,579	1,667	1.169	0.113	0.049	0.078
Currently using IUD	0.132	0.009	1,579	1,667	1.097	0.071	0.113	0.150
Currently using male condoms	0.021	0.004	1,579	1,667	0.970	0.165	0.014	0.029
Currently using injectables	0.004	0.002	1,579	1,667	0.964	0.364	0.001	0.008
Currently using female sterilization	0.019	0.004	1,579	1,667	1.047	0.189	0.012	0.026
Currently using withdrawal	0.181	0.011	1,579	1,667	1.092	0.058	0.160	0.202
Currently using periodic abstinence	0.006	0.002	1,579	1,667	1.061	0.334	0.002	0.011
Using public sector source	0.388	0.027	384	405	1.091	0.070	0.333	0.442
Want no more children	0.428	0.014	1,579	1,667	1.152	0.034	0.399	0.456
Want to delay at least 2 years	0.249	0.013	1,579	1,667	1.177	0.051	0.223	0.275
Ideal number of children	3.947	0.065	1,909	2,066	1.315	0.016	3.817	4.077
Mothers received antenatal care for last birth	0.930	0.009	1,085	1,146	1.170	0.010	0.912	0.948
Tetanus injections at last ANC visit	0.287	0.018	1,009	1,065	1.278	0.063	0.251	0.324
Births with skilled attendant at delivery	0.975	0.006	1,723	1,819	1.271	0.006	0.964	0.986
Vaccination card seen	0.811	0.021	359	379	1.025	0.026	0.768	0.854
Received BCG vaccination	0.833	0.021	359	379	1.053	0.025	0.791	0.875
Received TDAP-IPV-HIB vacc. (3 doses)	0.683	0.028	359	379	1.120	0.041	0.627	0.738
Received Hepatitis B vaccination (3 doses)	0.736	0.030	359	379	1.259	0.040	0.676	0.795
Received 1st dose of polio vaccination	0.766	0.024	359	379	1.074	0.032	0.718	0.815
Received 2nd dose of polio vaccination	0.552	0.029	350	370	1.081	0.053	0.493	0.610
Received pneumoccocal vaccination (3 doses)	0.683	0.029	359	379	1.162	0.042	0.625	0.740
Received Hepatitis A vaccination (2 doses)	0.360	0.021	350	370	0.806	0.059	0.317	0.403
Received chickenpox/variacella vaccination	0.718	0.030	350	370	1.228	0.042	0.657	0.778
Received MMR vaccination	0.820	0.021	350	370	1.011	0.026	0.778	0.863
Received all basic vaccinations	0.629	0.028	350	370	1.083	0.045	0.573	0.685
Received all age appropriate vaccinations (12-23 months)	0.599	0.033	359	379	1.252	0.054	0.534	0.664
Received all age appropriate vaccinations (24-35 months)	0.283	0.022	350	370	0.897	0.078	0.239	0.326
Height-for-age (-2SD)	0.174	0.013	1,498	1,582	1.207	0.074	0.148	0.200
Weight-for-height (-2SD)	0.019	0.004	1,552	1,639	1.013	0.188	0.012	0.027
Weight-for-age (-2SD)	0.034	0.005	1,508	1,592	0.999	0.146	0.024	0.045
Body Mass Index (BMI) <18.5	0.030	0.005	1,584	1,725	1.205	0.172	0.020	0.040
Body Mass Index (BMI) ≥ 25.0	0.601	0.013	1,584	1,725	1.049	0.021	0.575	0.627

Table B.4 Sampling errors, Camps, Turkey DHS 2018 - Syrian sample

Variable	Value (R)	Standard Error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design Effect (DEFT)	Relative Error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
Non-camp areas	0.000	0.000	253	90	.	.	0.000	0.000
Literate	0.826	0.037	253	90	1.555	0.045	0.752	0.901
No education/primary school incomplete	0.146	0.034	253	90	1.530	0.234	0.078	0.214
Secondary school or higher	0.349	0.045	253	90	1.500	0.129	0.259	0.440
Never married	0.199	0.040	253	90	1.571	0.199	0.120	0.279
Currently married/in union	0.750	0.046	253	90	1.669	0.061	0.658	0.841
Married before age 20	0.542	0.027	208	73	0.772	0.049	0.488	0.595
Currently pregnant	0.110	0.025	253	90	1.265	0.227	0.060	0.160
Children ever born	3.164	0.196	253	90	1.157	0.062	2.772	3.555
Children ever born to women over 40	4.618	0.546	41	14	1.129	0.118	3.526	5.710
Children surviving	3.034	0.193	253	90	1.203	0.064	2.648	3.420
Knowing any contraceptive method	1.000	0.000	191	67	.	0.000	1.000	1.000
Knowing any modern contraceptive method	1.000	0.000	191	67	.	0.000	1.000	1.000
Ever used any contraceptive method	0.738	0.043	191	67	1.349	0.058	0.652	0.824
Currently using any method	0.482	0.051	191	67	1.415	0.107	0.379	0.585
Currently using a modern method	0.225	0.030	191	67	0.985	0.133	0.165	0.285
Currently using pill	0.047	0.014	191	67	0.931	0.304	0.019	0.076
Currently using IUD	0.110	0.018	191	67	0.789	0.163	0.074	0.146
Currently using male condoms	0.042	0.017	191	67	1.198	0.416	0.007	0.077
Currently using injectables	0.000	0.000	191	67	.	.	0.000	0.000
Currently using female sterilization	0.026	0.009	191	67	0.816	0.361	0.007	0.045
Currently using withdrawal	0.257	0.041	191	67	1.278	0.158	0.175	0.338
Currently using periodic abstinence	0.000	0.000	191	67	.	.	0.000	0.000
Using public sector source	0.442	0.086	43	15	1.123	0.195	0.269	0.614
Want no more children	0.518	0.044	191	67	1.205	0.084	0.431	0.606
Want to delay at least 2 years	0.188	0.031	191	67	1.092	0.164	0.127	0.250
Ideal number of children	3.963	0.164	247	87	1.204	0.041	3.635	4.292
Mothers received antenatal care for last birth	0.914	0.024	139	49	1.025	0.027	0.865	0.963
Tetanus injections at last ANC visit	0.606	0.070	127	45	1.599	0.115	0.467	0.746
Births with skilled attendant at delivery	0.971	0.016	239	84	1.424	0.016	0.939	1.002
Vaccination card seen	0.872	0.062	39	14	1.150	0.071	0.748	0.995
Received BCG vaccination	0.897	0.043	39	14	0.890	0.048	0.811	0.984
Received TDAP-IPV-HIB vacc. (3 doses)	0.821	0.072	39	14	1.164	0.087	0.677	0.964
Received Hepatitis B vaccination (3 doses)	0.872	0.059	39	14	1.099	0.068	0.754	0.990
Received 1st dose of polio vaccination	0.846	0.059	39	14	1.018	0.070	0.728	0.964
Received 2nd dose of polio vaccination	0.682	0.079	44	15	1.124	0.116	0.523	0.840
Received pneumoccocal vaccination (3 doses)	0.795	0.078	39	14	1.201	0.098	0.639	0.951
Received Hepatitis A vaccination (2 doses)	0.455	0.078	44	15	1.036	0.172	0.299	0.611
Received chickenpox/variacella vaccination	0.841	0.056	44	15	1.010	0.066	0.729	0.953
Received MMR vaccination	0.932	0.038	44	15	0.998	0.041	0.856	1.008
Received all basic vaccinations	0.818	0.071	44	15	1.223	0.087	0.675	0.961
Received all age appropriate vaccinations (12-23 months)	0.744	0.084	39	14	1.202	0.113	0.575	0.912
Received all age appropriate vaccinations (24-35 months)	0.318	0.069	44	15	0.978	0.216	0.180	0.456
Height-for-age (-2SD)	0.173	0.039	196	69	1.215	0.224	0.096	0.251
Weight-for-height (-2SD)	0.005	0.005	207	73	0.963	0.965	0.000	0.014
Weight-for-age (-2SD)	0.050	0.021	199	70	1.163	0.415	0.009	0.092
Body Mass Index (BMI) < 18.5	0.033	0.014	213	75	1.162	0.430	0.005	0.062
Body Mass Index (BMI) ≥ 25.0	0.575	0.029	213	75	0.862	0.051	0.517	0.633

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Turkey DHS 2018 - Syrian Sample

	Female		Male			Female		Male	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	200	3.8	255	4.5	37	39	0.7	53	0.9
1	177	3.4	217	3.8	38	55	1.1	70	1.2
2	196	3.7	211	3.7	39	42	0.8	45	0.8
3	172	3.3	179	3.2	40	67	1.3	72	1.3
4	164	3.1	190	3.4	41	38	0.7	30	0.5
5	151	2.9	122	2.2	42	44	0.8	48	0.8
6	154	2.9	151	2.7	43	30	0.6	31	0.6
7	156	3.0	151	2.7	44	29	0.5	27	0.5
8	154	2.9	169	3.0	45	40	0.8	47	0.8
9	119	2.3	168	3.0	46	23	0.4	23	0.4
10	150	2.9	149	2.6	47	25	0.5	38	0.7
11	151	2.9	153	2.7	48	20	0.4	32	0.6
12	128	2.4	139	2.5	49	23	0.4	15	0.3
13	145	2.8	143	2.5	50	46	0.9	35	0.6
14	145	2.8	133	2.3	51	24	0.5	27	0.5
15	69	1.3	126	2.2	52	25	0.5	28	0.5
16	95	1.8	99	1.8	53	28	0.5	33	0.6
17	94	1.8	131	2.3	54	27	0.5	11	0.2
18	141	2.7	132	2.3	55	40	0.8	31	0.5
19	113	2.2	107	1.9	56	14	0.3	14	0.2
20	121	2.3	138	2.4	57	16	0.3	7	0.1
21	109	2.1	94	1.7	58	27	0.5	15	0.3
22	106	2.0	131	2.3	59	10	0.2	10	0.2
23	108	2.1	127	2.2	60	40	0.8	40	0.7
24	77	1.5	98	1.7	61	9	0.2	13	0.2
25	101	1.9	121	2.1	62	8	0.2	13	0.2
26	78	1.5	94	1.7	63	13	0.2	12	0.2
27	112	2.1	92	1.6	64	8	0.2	6	0.1
28	92	1.8	91	1.6	65	28	0.5	25	0.4
29	64	1.2	68	1.2	66	8	0.2	5	0.1
30	95	1.8	132	2.3	67	8	0.2	4	0.1
31	54	1.0	73	1.3	68	9	0.2	6	0.1
32	75	1.4	95	1.7	69	2	0.0	5	0.1
33	74	1.4	72	1.3	70+	63	1.2	53	0.9
34	45	0.9	55	1.0	Don't know/ missing	0	0.0	3	0.1
35	83	1.6	75	1.3					
36	40	0.8	58	1.0	Total	5,236	100.0	5,661	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, number and percent distribution of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by 5-year age groups, Turkey DHS 2018 - Syrian Sample

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	719	-	-	-
15-19	511	452	20.2	88.4
20-24	521	491	22.0	94.3
25-29	447	416	18.6	93.0
30-34	342	315	14.1	92.1
35-39	260	248	11.1	95.4
40-44	207	192	8.6	93.0
45-49	131	123	5.5	93.9
50-54	151	-	-	-
15-49	2,419	2,237	100.0	92.5

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), 2018 TNSA - Syrian sample

Subject	Reference	Percentage with information missing	Number of cases
Birth date	Births in the 15 years preceding the survey		
Day only		5.41	4,489
Day and month		9.87	4,489
Day, month, and year		1.15	4,489
Age at death	Deceased children born in the 15 years preceding the survey	0.00	163
Age/date at first union[1]	Ever-married women age 15-49	7.32	1,847
Respondent's education	Women age 15-49	0.00	2,216
Anthropometry of children	Living children age 0-59 months (from the Individual Questionnaire)		
Height		8.46	1,903
Weight		8.27	1,903
Height or weight		8.68	1,903
Anthropometry of children	Women age 15-49 (from the Individual Questionnaire)		
Height		1.32	2,216
Weight		1.58	2,216
Height or weight		1.57	2,237

[1] Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted), Turkey DHS 2018 - Syrian Sample

	Number of births			Percentage with year and month of birth given			Sex ratio at birth[1]			Calendar year ratio[2]		
Calendar year	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2019	231	5	235	98.6	100.0	98.7	117.1	44.5	115.0	-	-	-
2018	393	4	396	97.5	100.0	97.5	139.8	150.0	139.9	-	-	-
2017	415	14	429	95.4	100.0	95.5	94.4	150.0	95.8	113.3	210.5	115.0
2016	341	10	351	94.1	75.0	93.6	108.0	211.1	109.9	89.7	84.8	89.5
2015	344	9	354	93.1	76.9	92.7	114.2	62.5	112.4	112.6	123.2	112.8
2014	271	5	276	89.5	78.9	89.3	85.7	180.2	86.9	85.3	43.8	83.9
2013	291	14	305	90.2	69.2	89.3	117.3	160.0	119.0	102.3	127.4	103.3
2012	298	17	314	89.3	48.9	87.2	93.8	104.3	94.3	103.3	108.0	103.5
2011	286	17	302	87.2	56.3	85.5	105.6	45.5	101.0	101.8	145.4	103.5
2010	263	7	270	87.5	47.4	86.5	109.3	58.3	107.7	96.9	50.0	94.7
2015 - 2019	1,724	41	1,765	95.6	88.9	95.4	113.3	116.7	113.3	-	-	-
2010 - 2014	1,409	59	1,468	88.8	58.1	87.5	101.8	89.9	101.3	-	-	-
2005 - 2009	1,106	59	1,165	83.5	46.8	81.7	105.8	131.4	107.0	-	-	-
2000 - 2004	687	57	743	80.9	57.8	79.2	113.8	120.5	114.3	-	-	-
<2000	685	81	765	72.1	52.8	70.1	103.8	146.2	107.5	-	-	-
All	5,611	296	5,907	86.8	58.6	85.4	107.7	121.2	108.3	-	-	-

[1] (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively
[2] [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under age 1 month by age at death in days and percentage of neonatal deaths reported to occur at ages 0-6 days, for 5-year periods preceding the survey (weighted), Turkey DHS 2018 - Syrian Sample

	Number of years preceding the survey				
Age at death (days)	0-4	5-9	10-14	15-19	Total 0-19
<1	7	11	9	9	35
1	1	4	4	0	9
2	3	3	4	3	13
3	0	2	4	0	6
4	1	1	2	0	4
5	0	1	1	0	2
6	0	1	0	0	1
7	2	1	2	0	6
8	1	0	0	0	1
9	0	1	0	0	1
10	1	1	1	0	4
12	0	1	1	0	2
14	0	1	0	0	1
15	1	2	0	2	5
18	1	0	0	0	1
20	1	0	2	1	5
21	1	0	0	0	1
23	1	0	0	0	1
27	1	0	0	0	1
Total 0-30	23	30	30	16	99
Percentage early neonatal[1]	53.8	74.4	78.8	75.7	71.2

[1] 0-6 days / 0-30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 years by age at death in months and percentage of infant deaths reported to occur at age under 1 month, for 5-year periods preceding the survey (weighted), Turkey DHS 2018 - Syrian Sample

	Number of years preceding the survey				Total
Age at death (months)	0-4	5-9	10-14	15-19	0-19
<1[a]	23	30	30	16	99
1	2	3	7	5	17
2	2	2	2	1	8
3	0	3	2	0	6
4	0	2	3	4	10
5	5	1	2	1	9
6	0	1	0	1	2
7	2	1	0	1	5
8	2	0	0	1	3
9	2	2	0	0	5
10	0	1	0	1	2
11	0	0	2	0	2
12	1	1	0	1	4
14	0	0	1	0	1
15	1	1	0	1	3
16	0	0	1	0	1
18	1	1	0	1	3
Total 0-11	39	47	49	33	168
Percentage neonatal[1]	58.5	63.6	61.6	48.4	58.9

[a] Includes deaths under one month reported in days
[1] Under one month / under one year

PERSONS INVOLVED IN THE 2018 TURKEY DEMOGRAPHIC AND HEALTH SURVEY SYRIAN MIGRANT SAMPLE

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